

FIG. 1

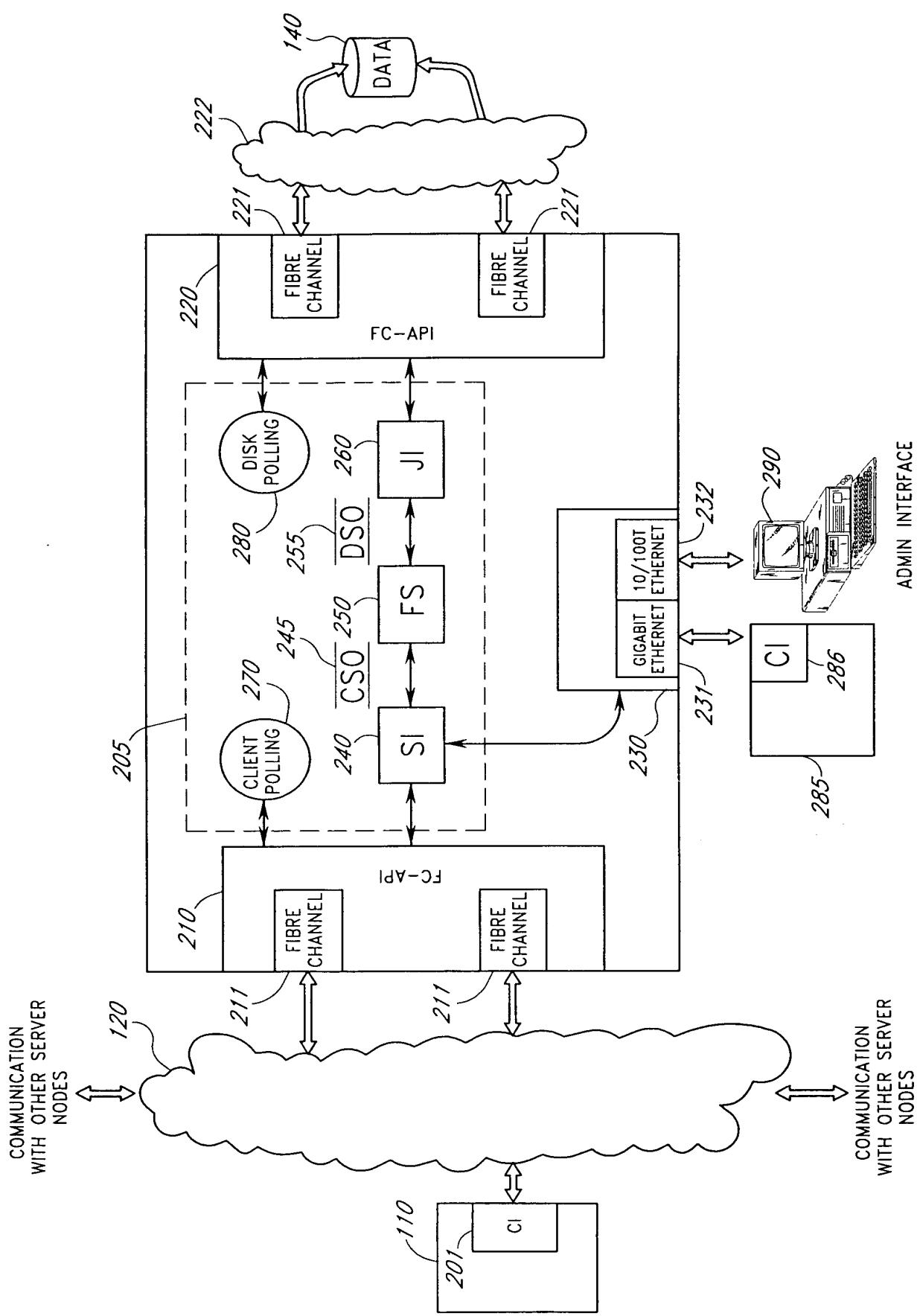


FIG. 2

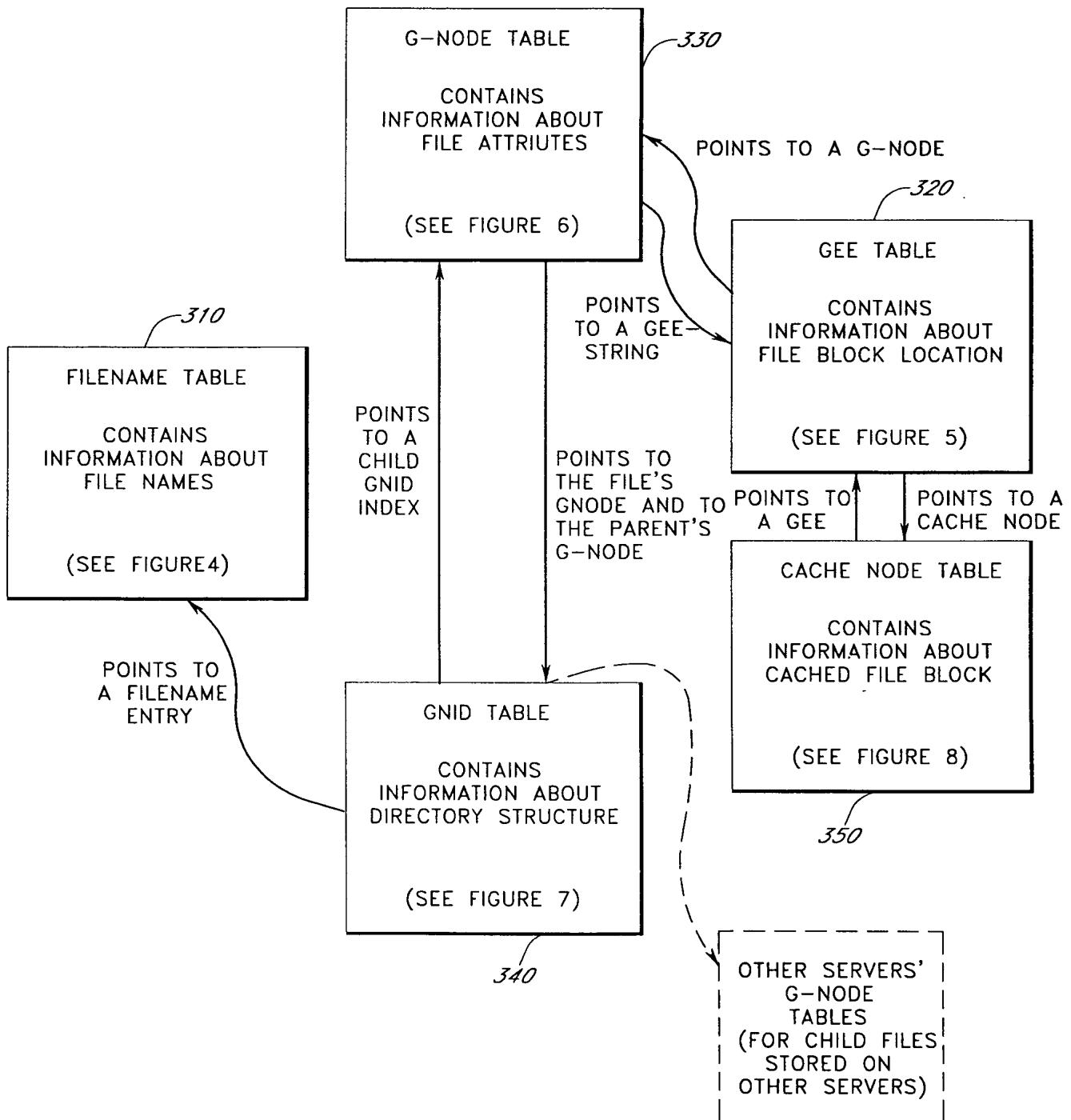


FIG.3

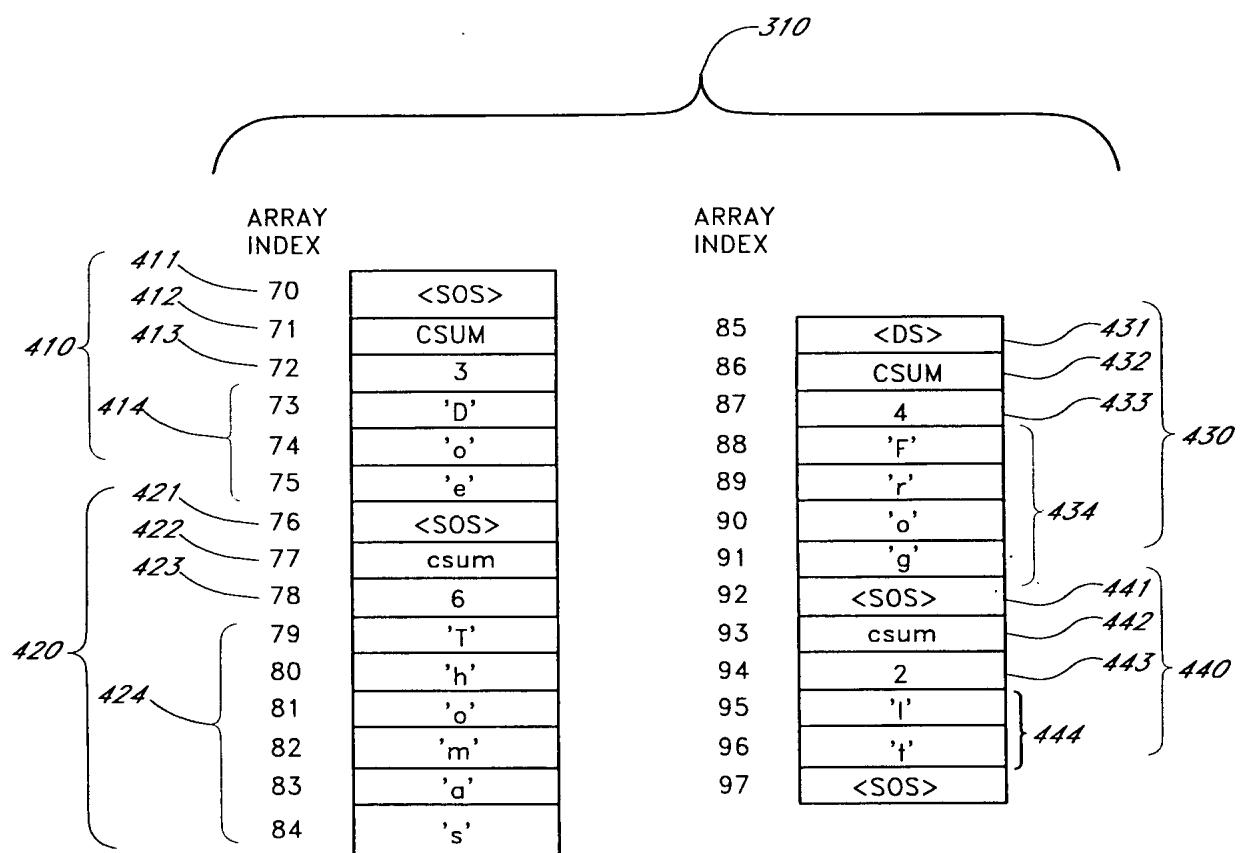


FIG. 4

INDEX	G-CODE	DATA	FILE LOGICAL BLOCK
510	45 GNODE	GNODE=67, EXTENT=2, ROOT=TRUE	
511	46 DATA	DISK LOGICAL BLOCKS: 456,457 DRIVE 13	1
512	47 DATA	DISK LOGICAL BLOCKS: 667,668 DRIVE 15	2
513	48 DATA	DISK LOGICAL BLOCKS: 112,113 DRIVE 19	3
514	49 PARITY	DISK LOGICAL BLOCKS: 554,555 DRIVE 2	
515	50 DATA	DISK LOGICAL BLOCKS: 458,459 DRIVE 13	4
516	51 DATA	DISK LOGICAL BLOCKS: 669,670 DRIVE 15	5
517	52 DATA	DISK LOGICAL BLOCKS: 119,120 DRIVE 19	6
518	53 PARITY	DISK LOGICAL BLOCKS: 556,557 DRIVE 2	
519	54 LINK	INDEX 76	
...	
520	76 GNODE	GNODE=67, EXTENT=3, ROOT=FALSE	
521	77 DATA	DISK LOGICAL BLOCKS: 460,461,462 DRIVE 13	7
522	78 DATA	DISK LOGICAL BLOCKS: 671,672,673 DRIVE 15	8
523	79 PARITY	DISK LOGICAL BLOCKS: 121,122,123 DRIVE 19	
524	80 LINK	INDEX 88	
...	
525	88 GNODE	GNODE=67, EXTENT=3, ROOT=FALSE	
526	89 DATA	DISK LOGICAL BLOCKS: 463,464,465 DRIVE 13	9
527	90 DATA	DISK LOGICAL BLOCKS: 674,675,676 DRIVE 15	10
528	91 PARITY	DISK LOGICAL BLOCKS: 124,125,126 DRIVE 19	
529	92 GNODE	GNODE=43, EXTENT=4, ROOT=FALSE	
...	

FIG. 5

ATTRIBUTE DATA	
602	FILE ATTRIBUTE-TYPE
604	FILE ATTRIBUTE-MODE
606	FILE ATTRIBUTE-LINKS
608	FILE ATTRIBUTE-UID
610	FILE ATTRIBUTE-GID
612	FILE ATTRIBUTE-SIZE
614	FILE ATTRIBUTE-USED
620	FILE ATTRIBUTE-FILEID
622	FILE ATTRIBUTE-ATIME
624	FILE ATTRIBUTE-MTIME
626	FILE ATTRIBUTE-CTIME
628	CHILD GNID INDEX
630	GEE INDEX-LAST USED
631	GEE OFFSET-LAST USED
632	GEE INDEX-MIDPOINT
633	GEE OFFSET-MIDPOINT
634	GEE INDEX-TAIL
635	GEE OFFSET-TAIL
636	GEE INDEX-ROOT
638	GNODE STATUS
640	QUICK SHOT STATUS
642	QUICK SHOT LINK

600

FIG. 6

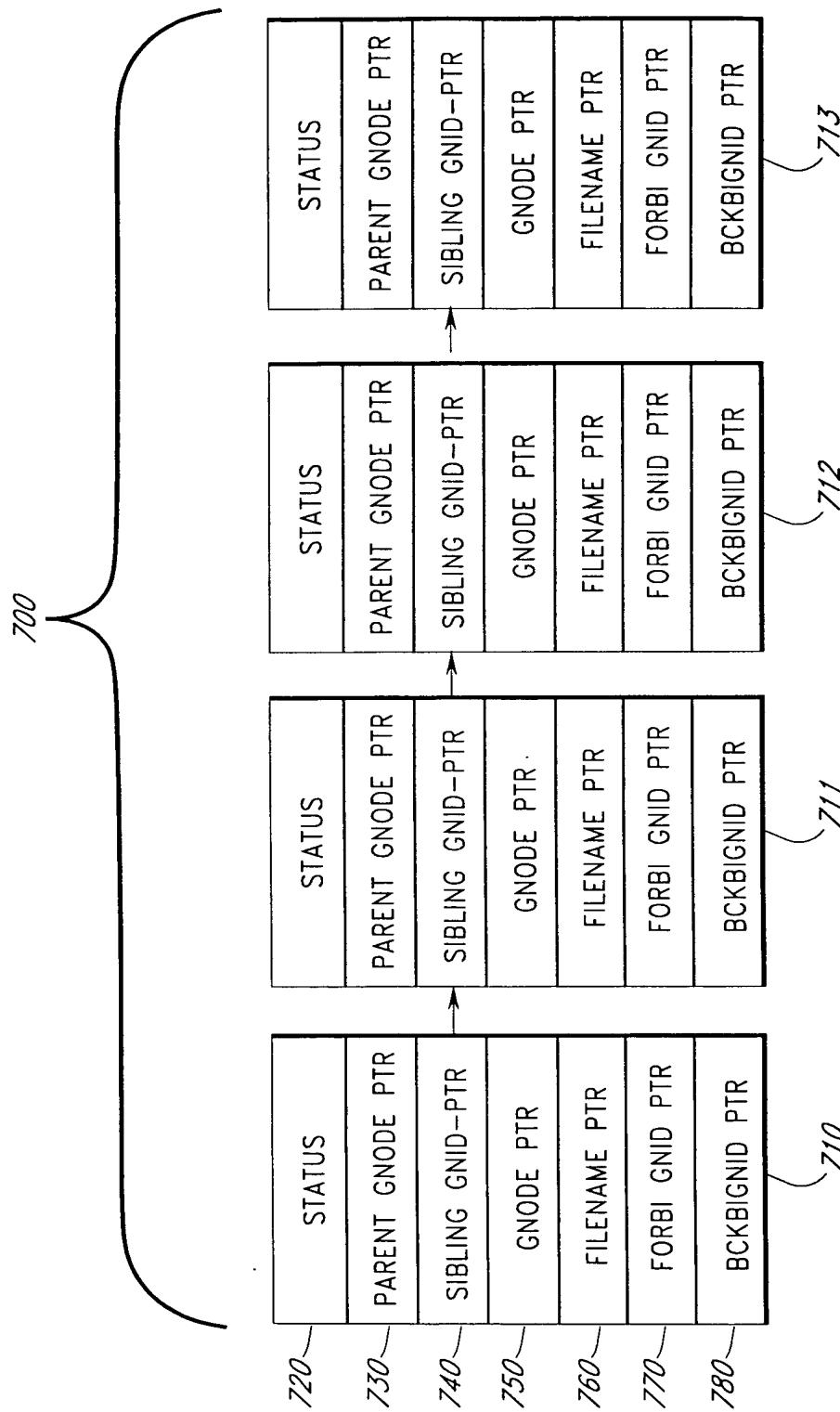


FIG. 7

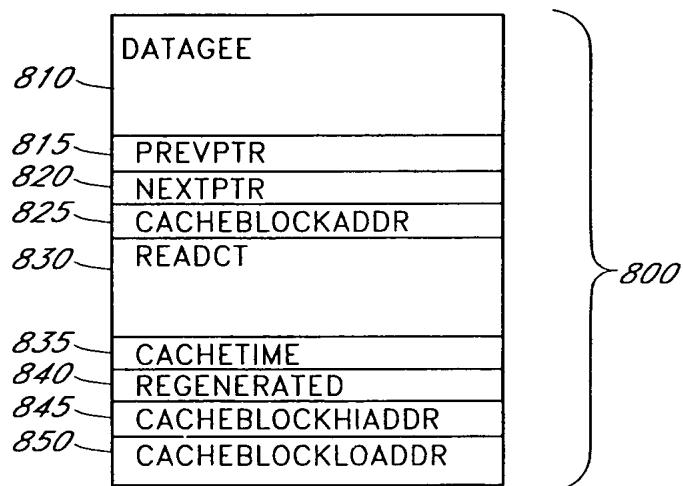


FIG. 8A

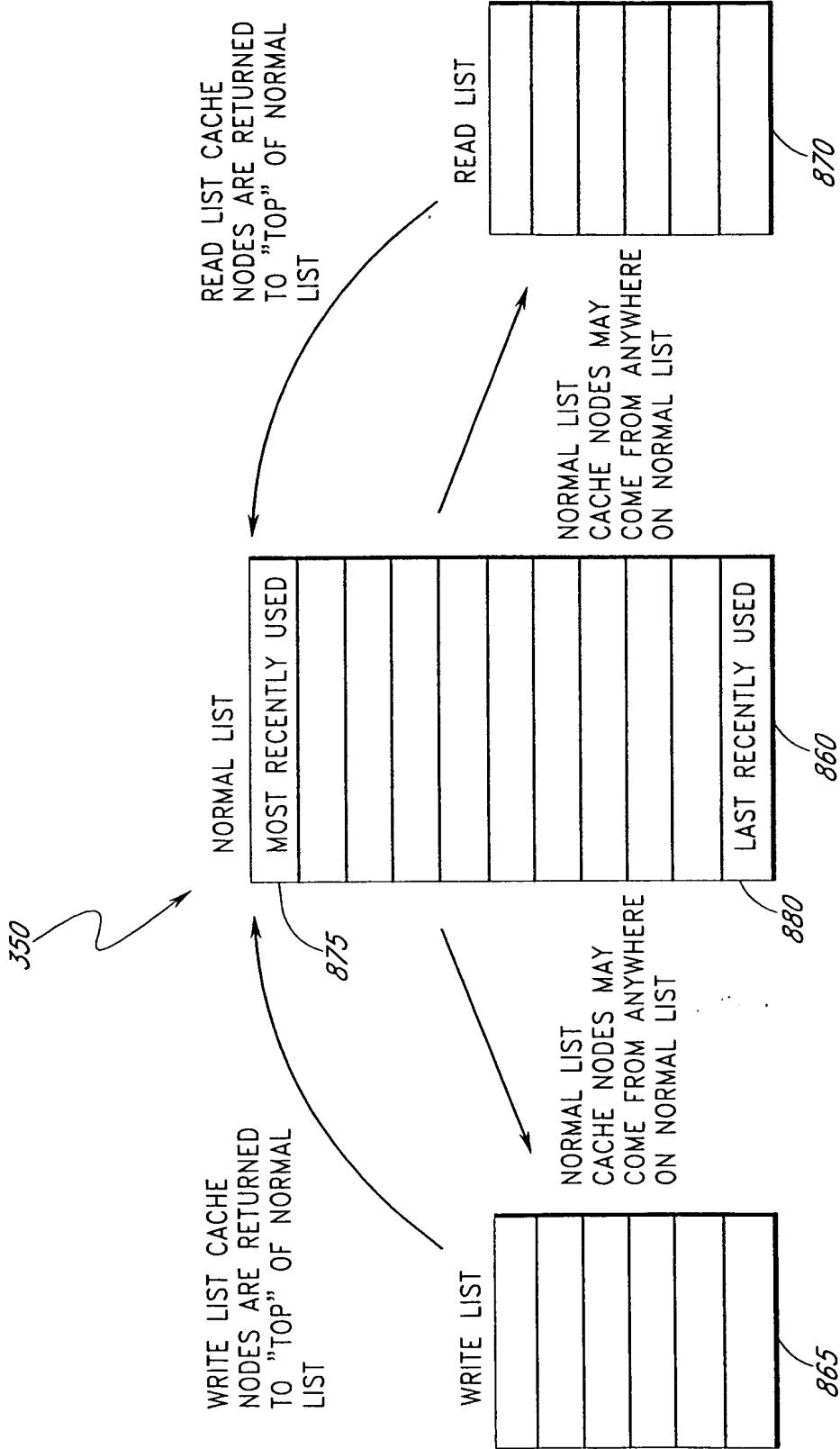


FIG. 8B

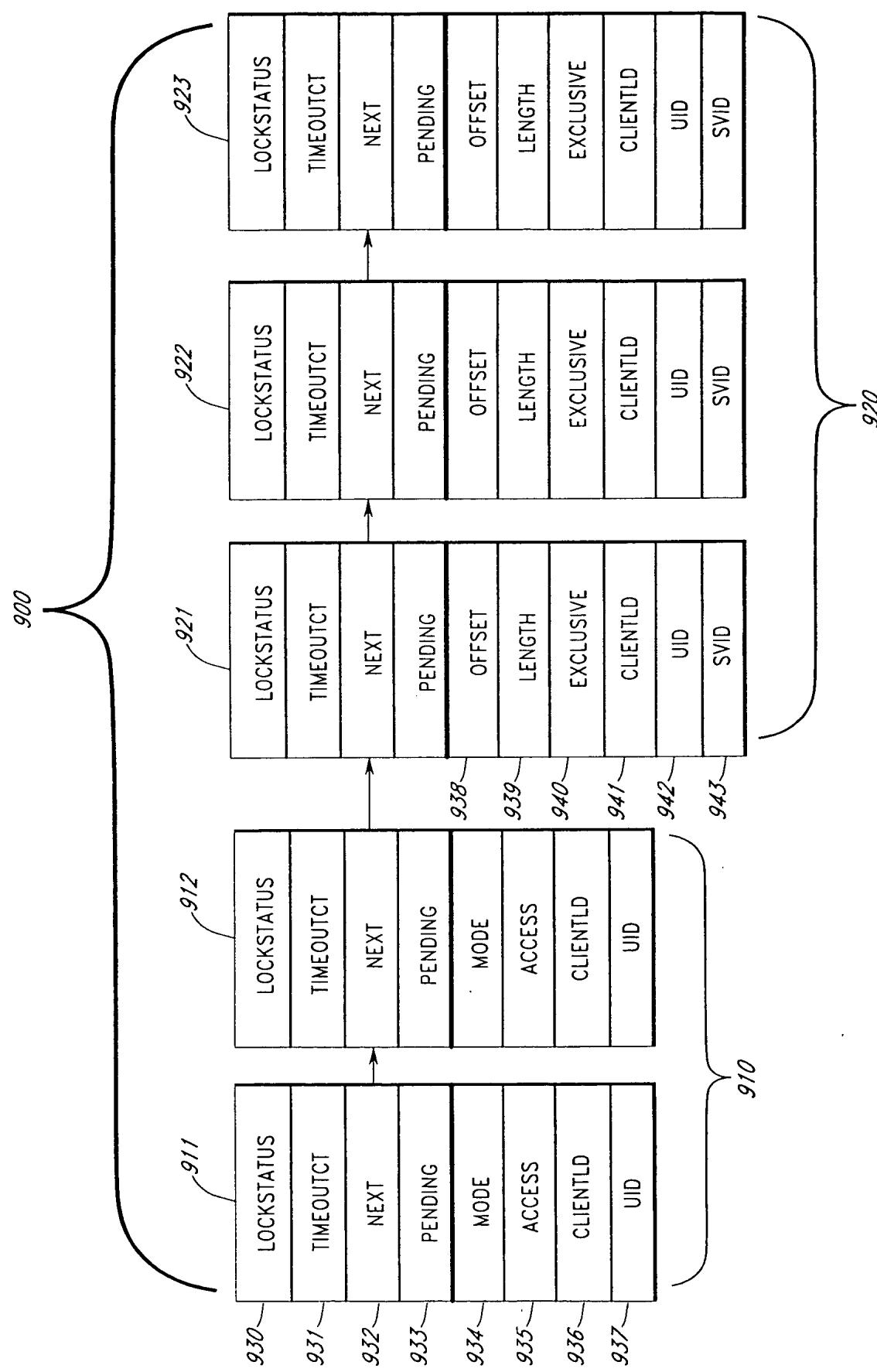


FIG. 9

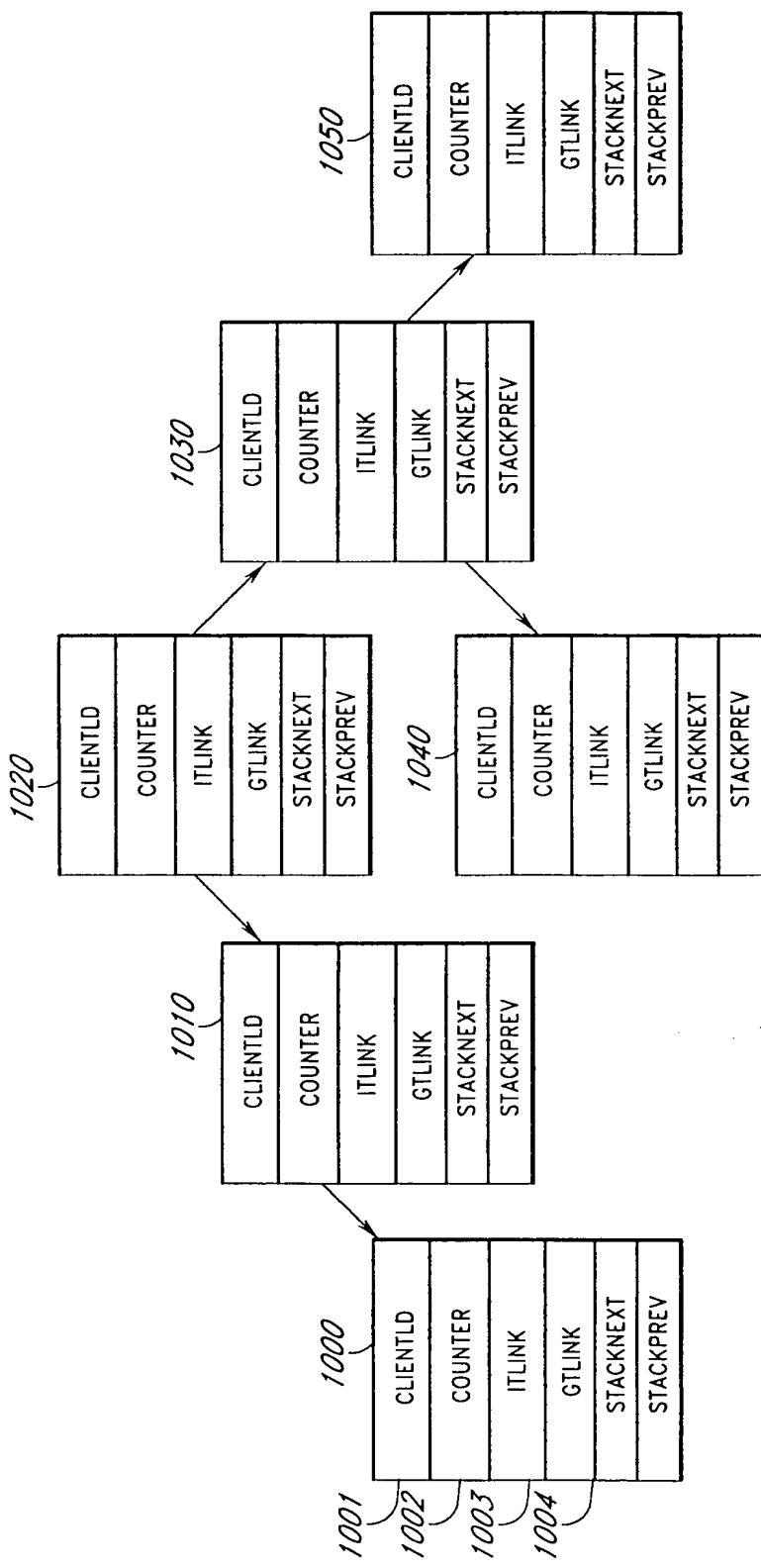


FIG. 10

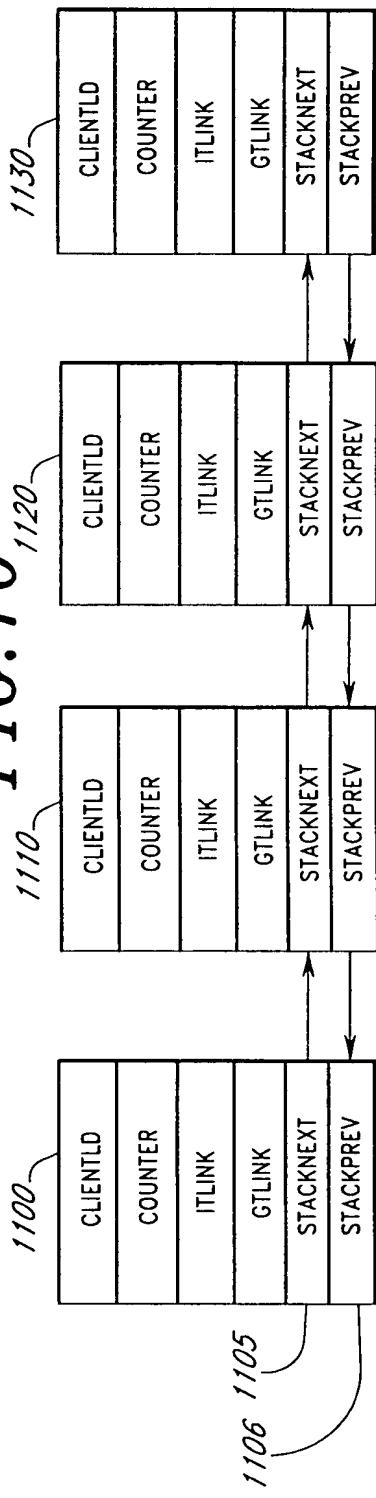


FIG. 11

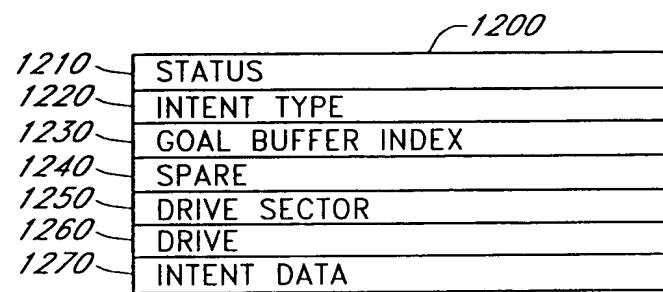


FIG. 12

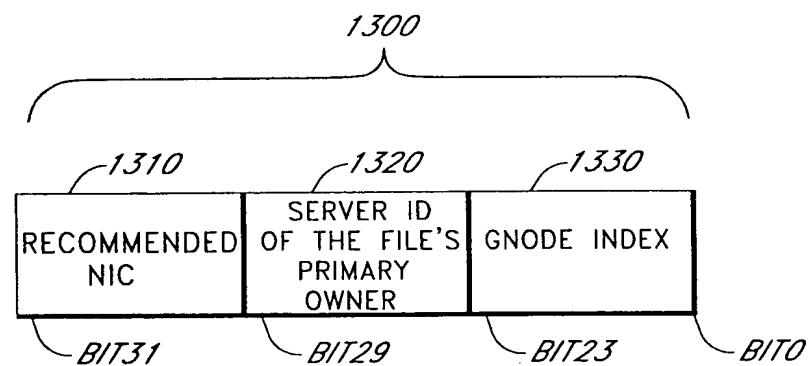


FIG. 13

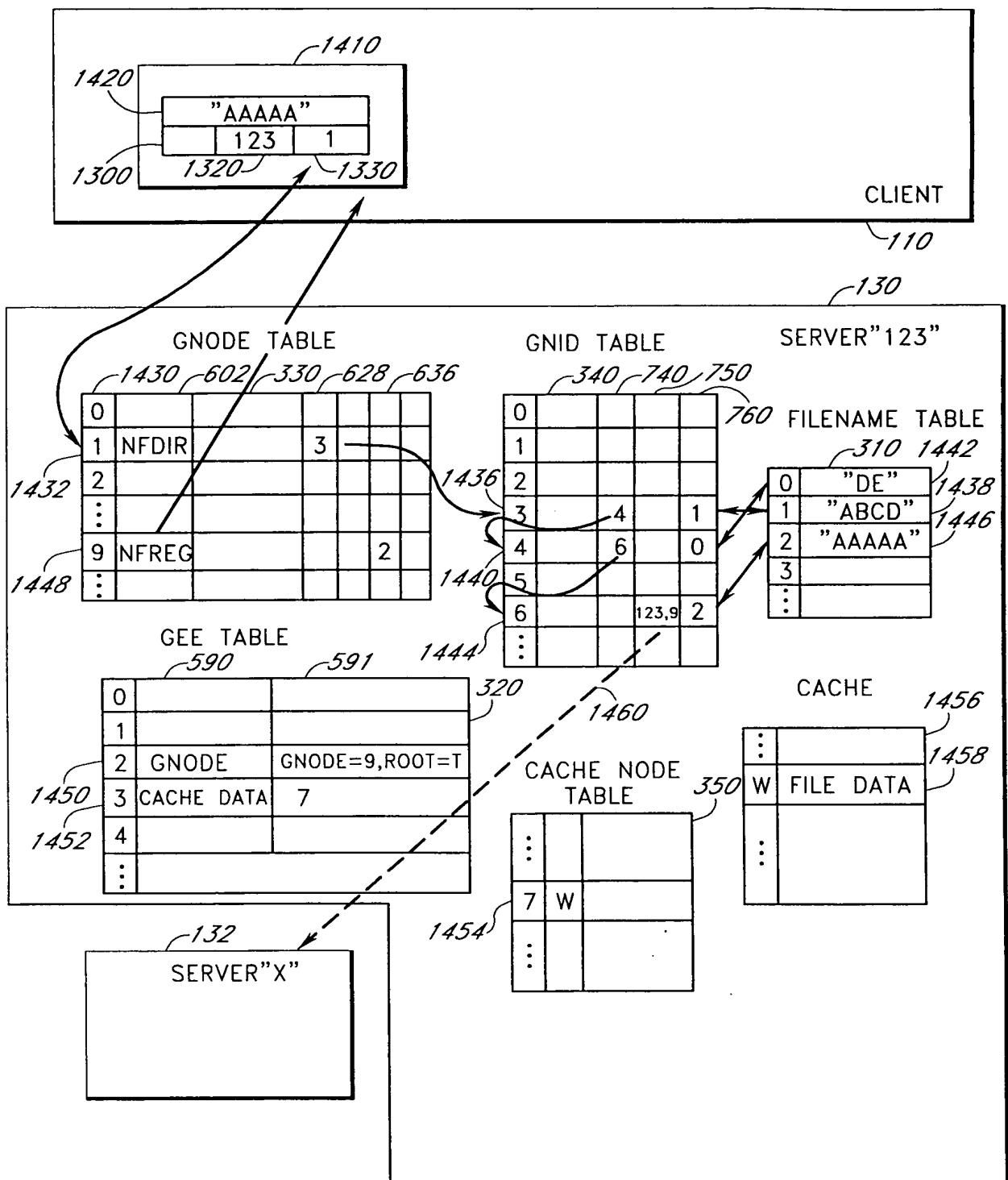


FIG. 14A

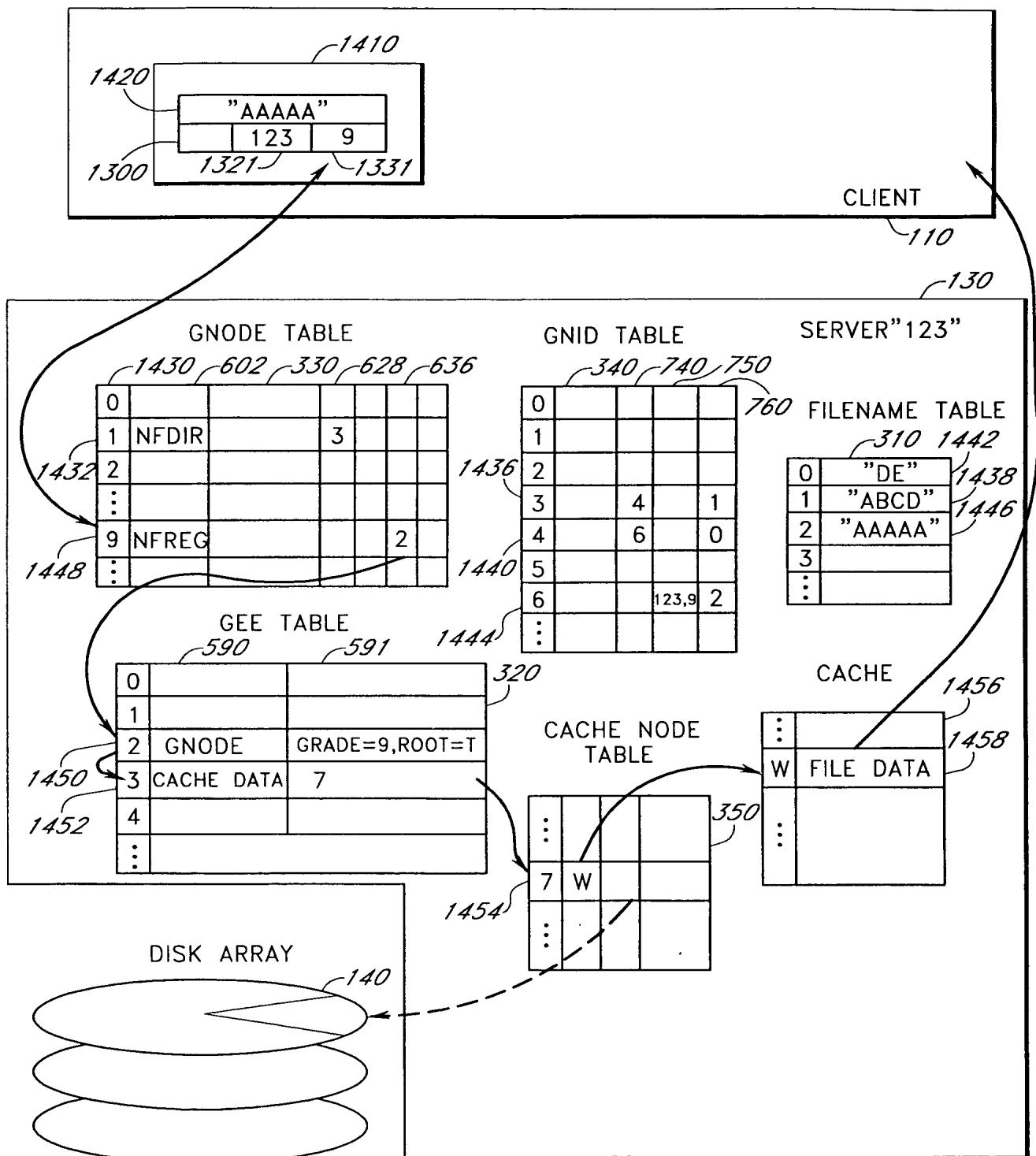


FIG. 14B

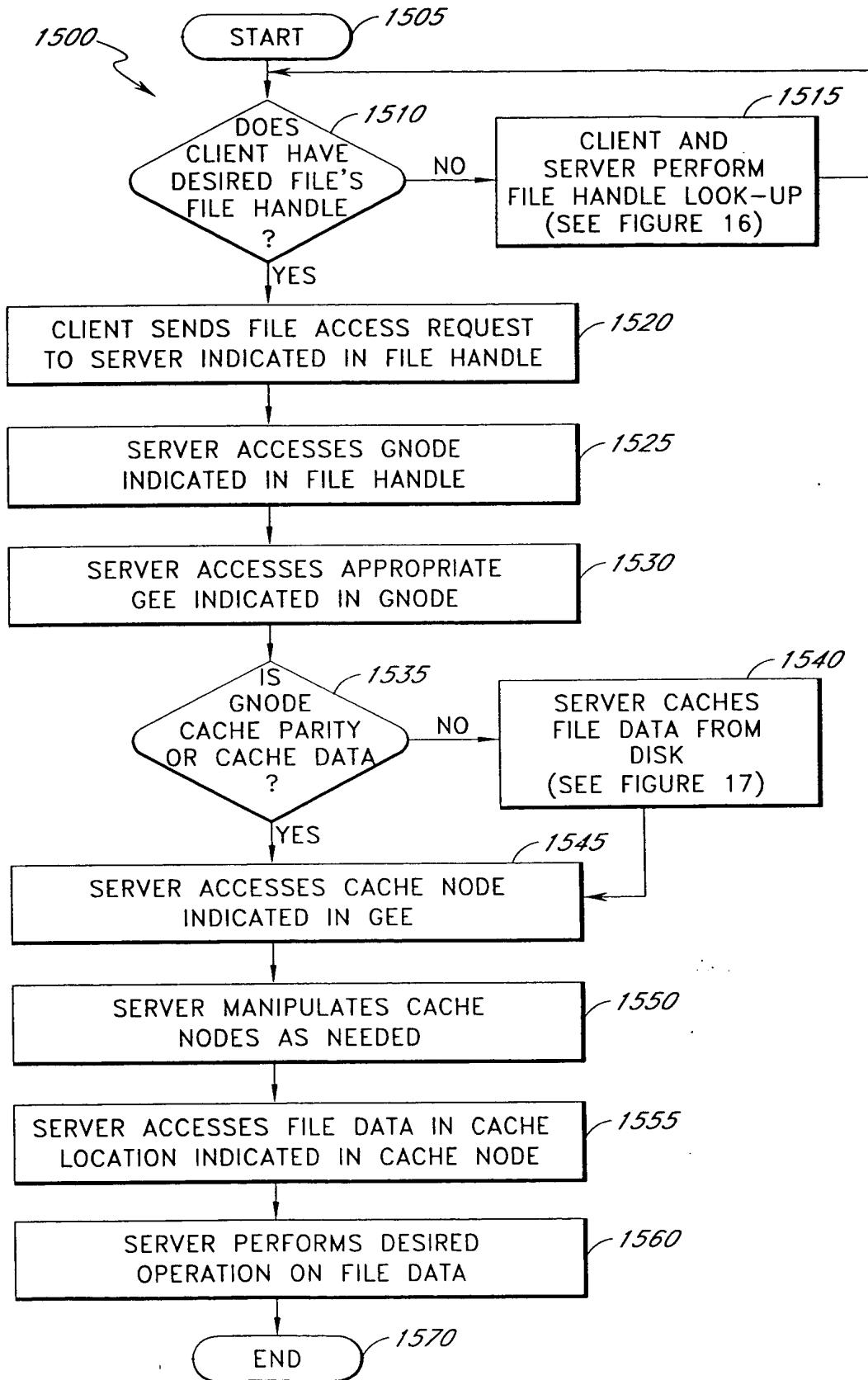


FIG. 15

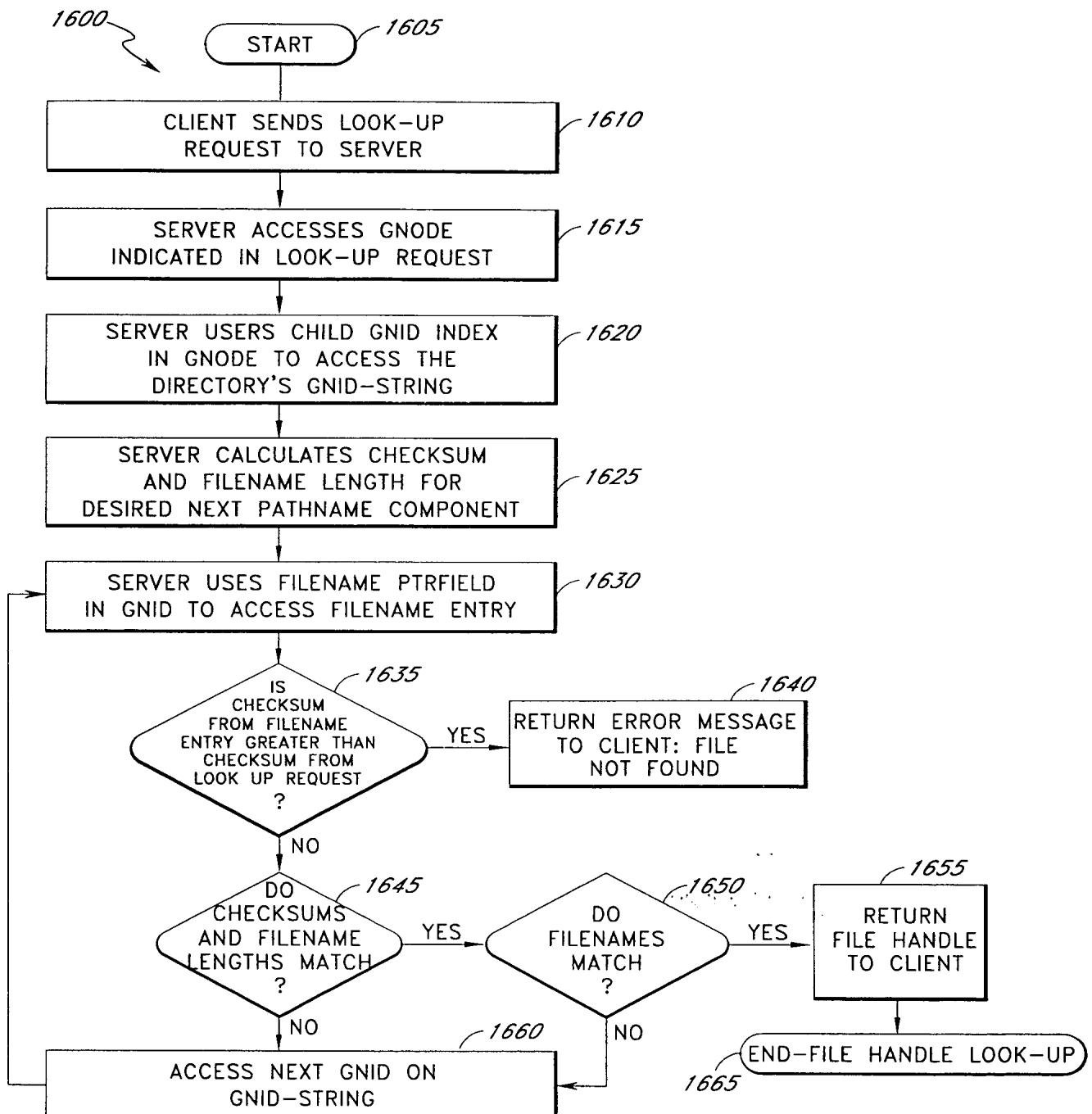


FIG. 16

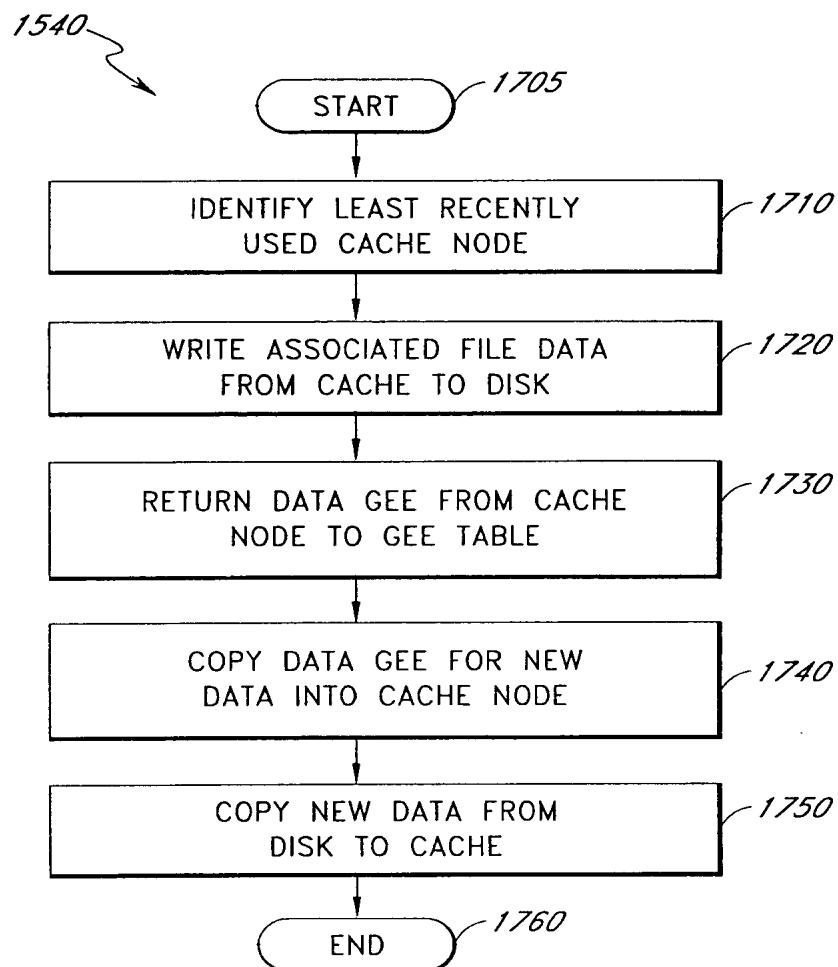


FIG. 17

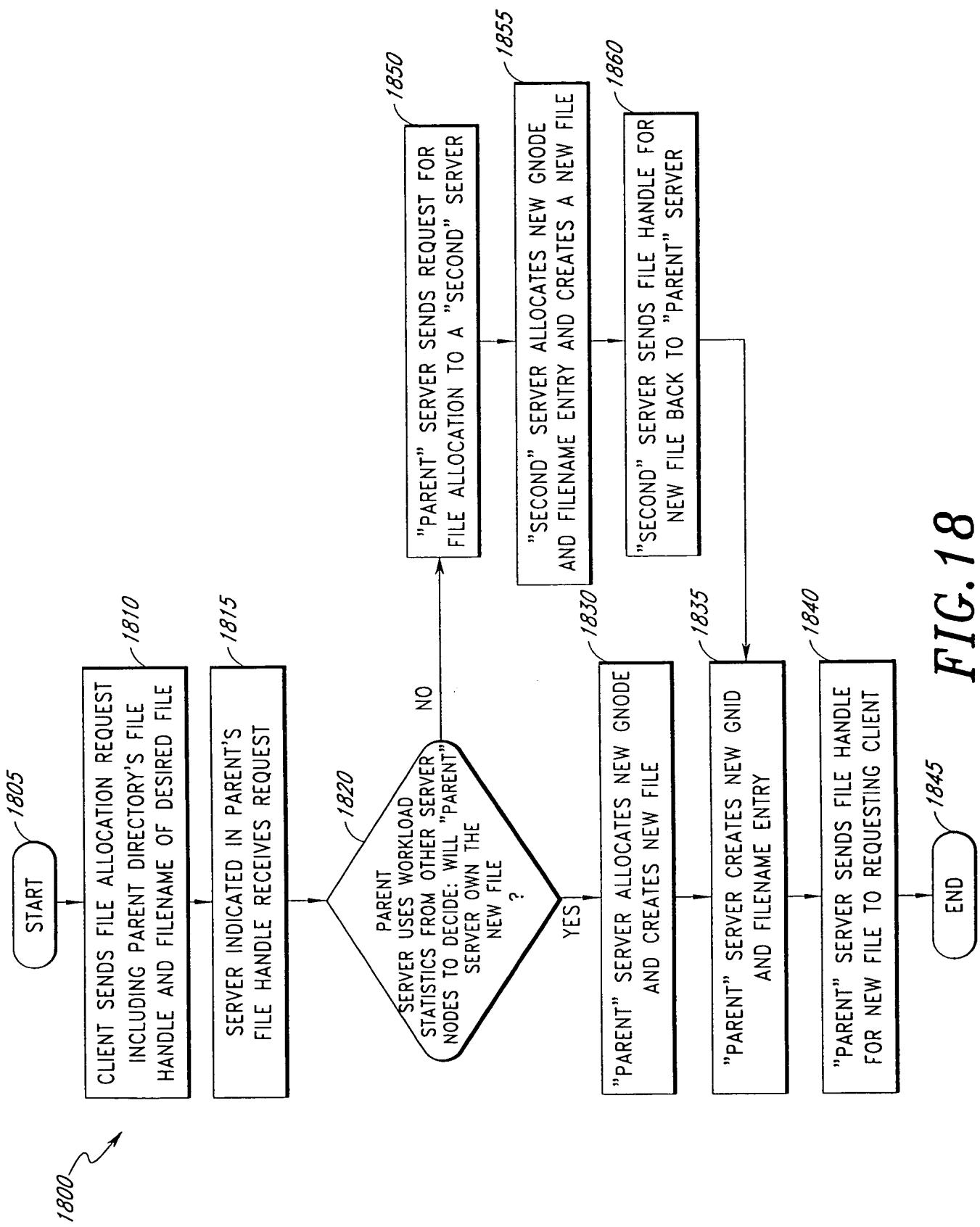


FIG. 18

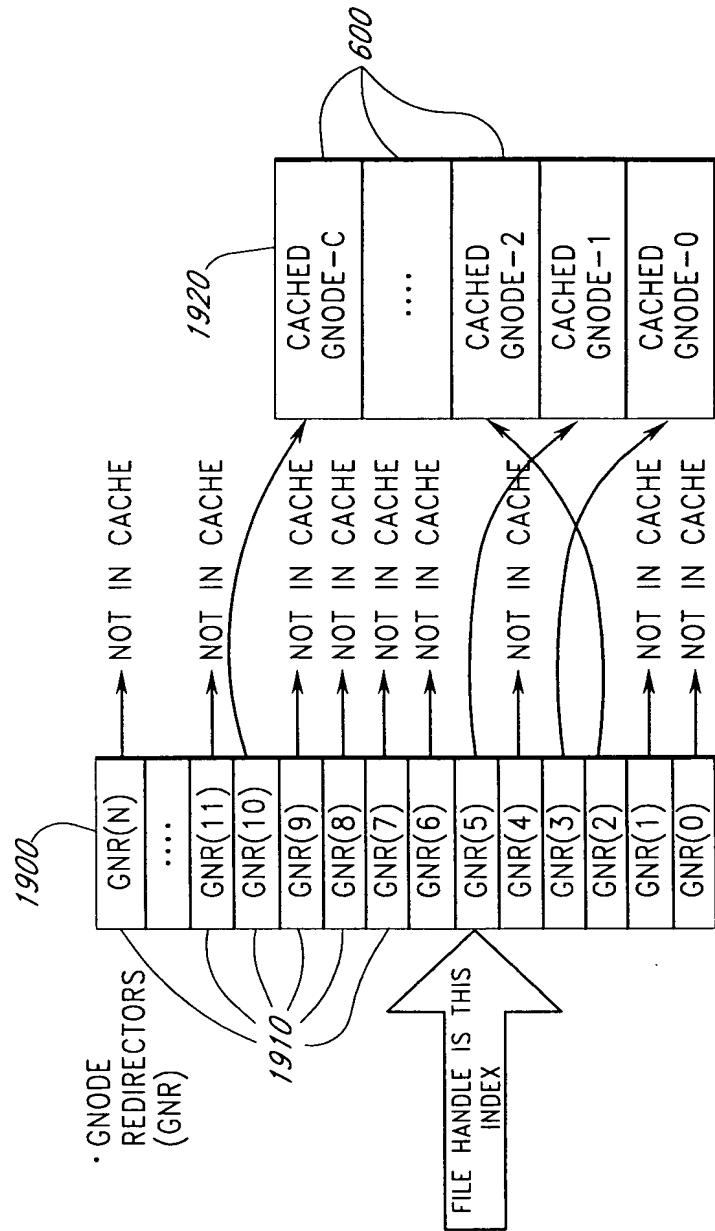


FIG. 19

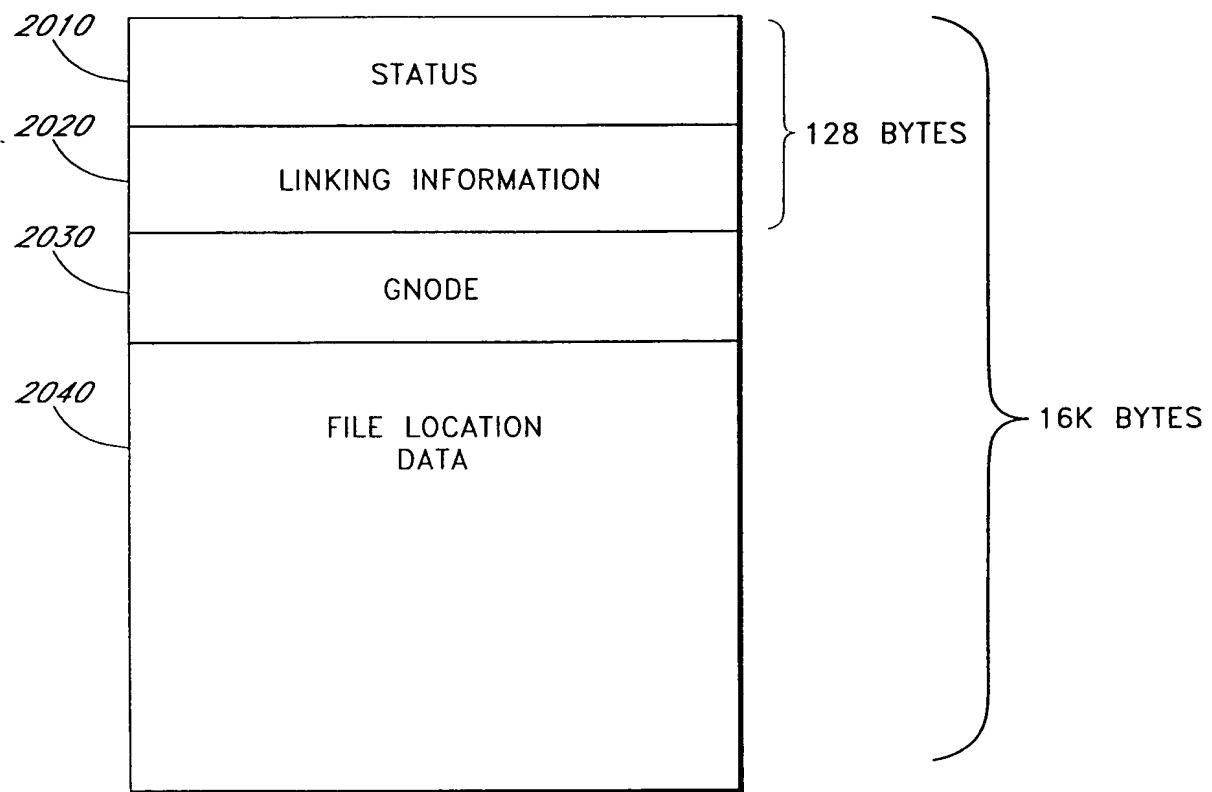


FIG.20A

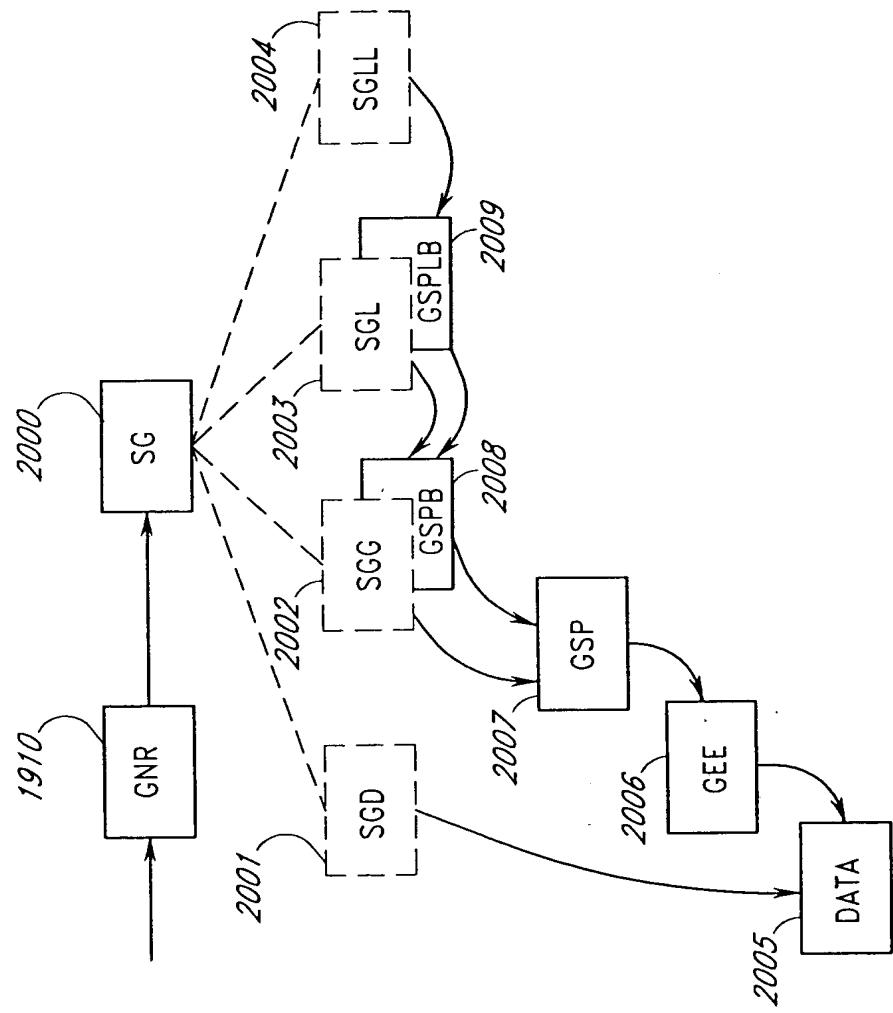


FIG. 20B

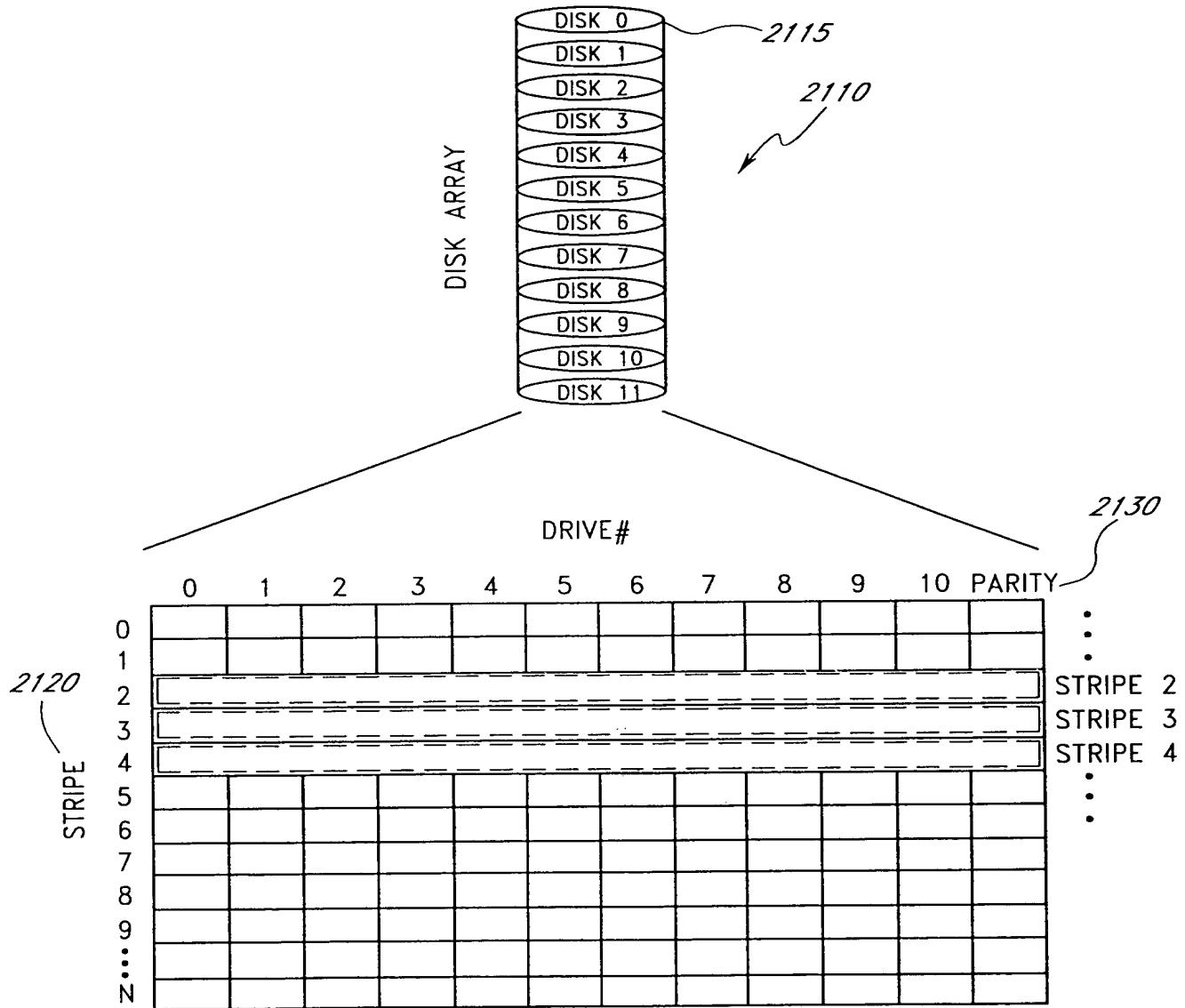
CONVENTIONAL RAID MAPPING
(PRIOR ART)

FIG.21

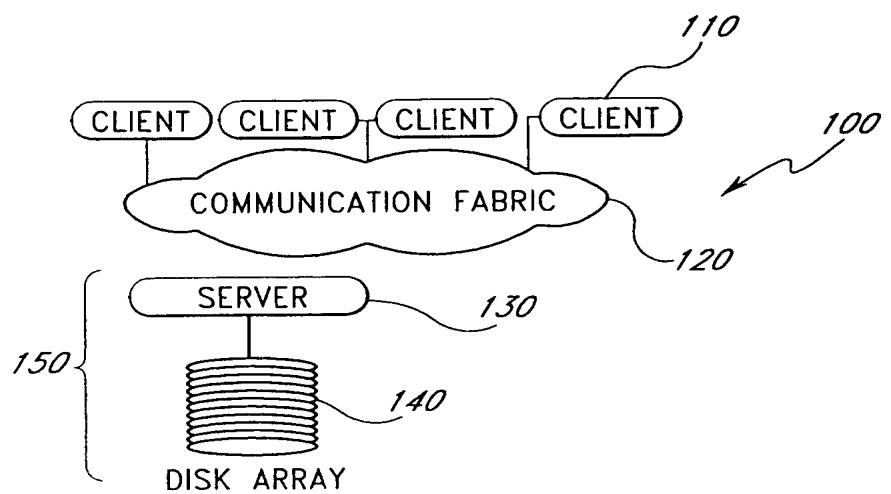


FIG.22A

CLUSTER

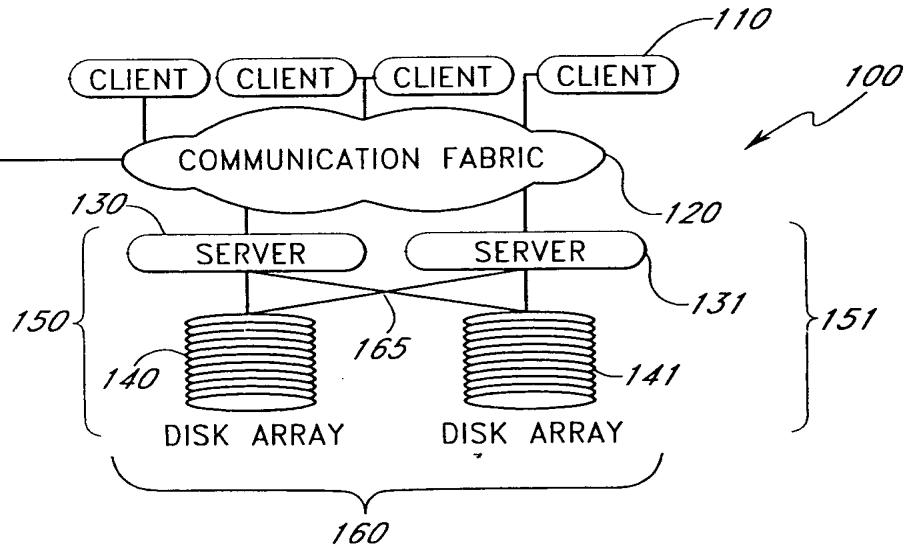
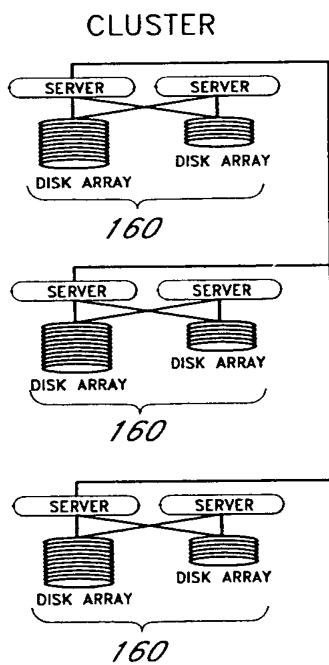


FIG.22B

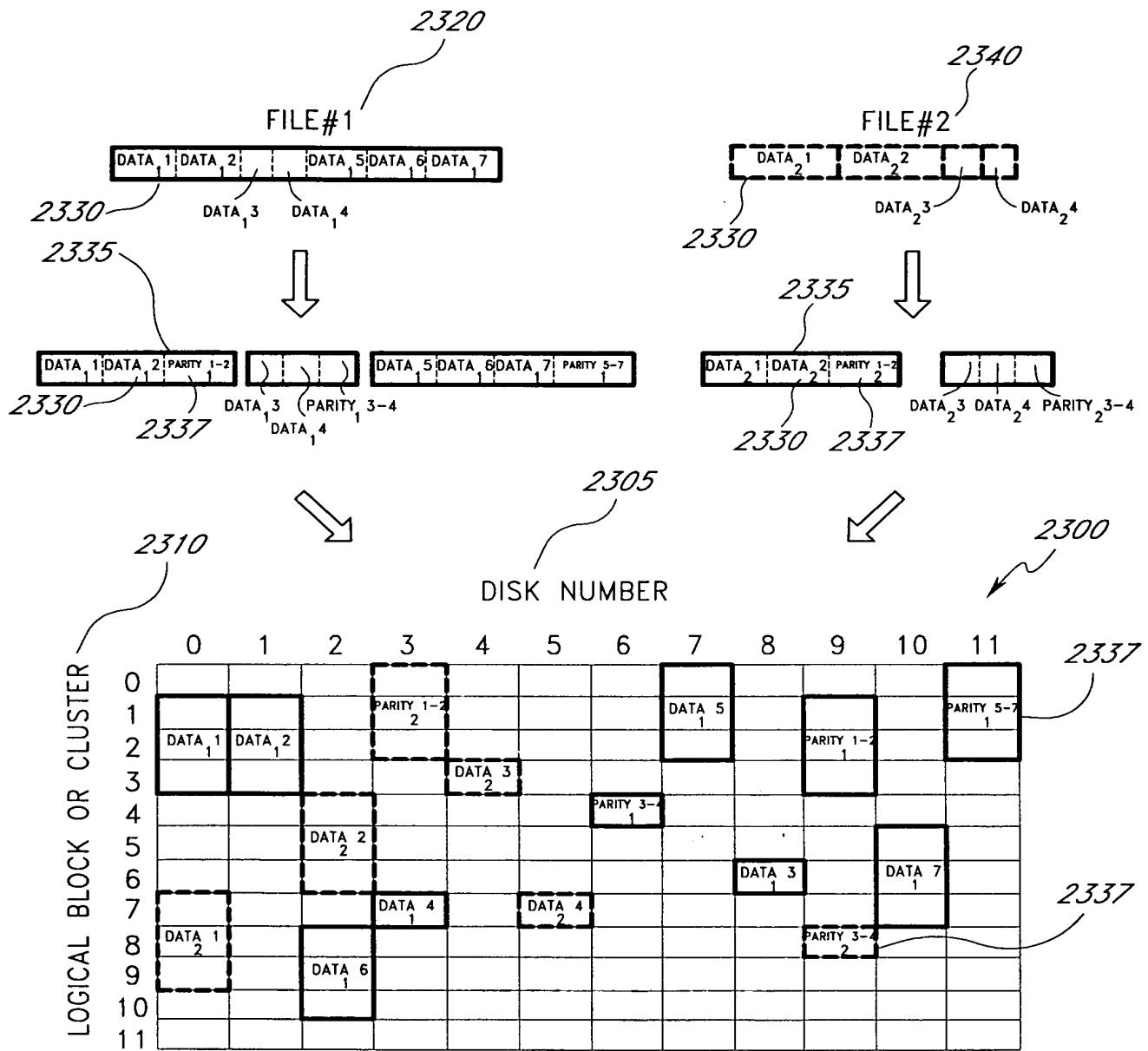


FIG.23

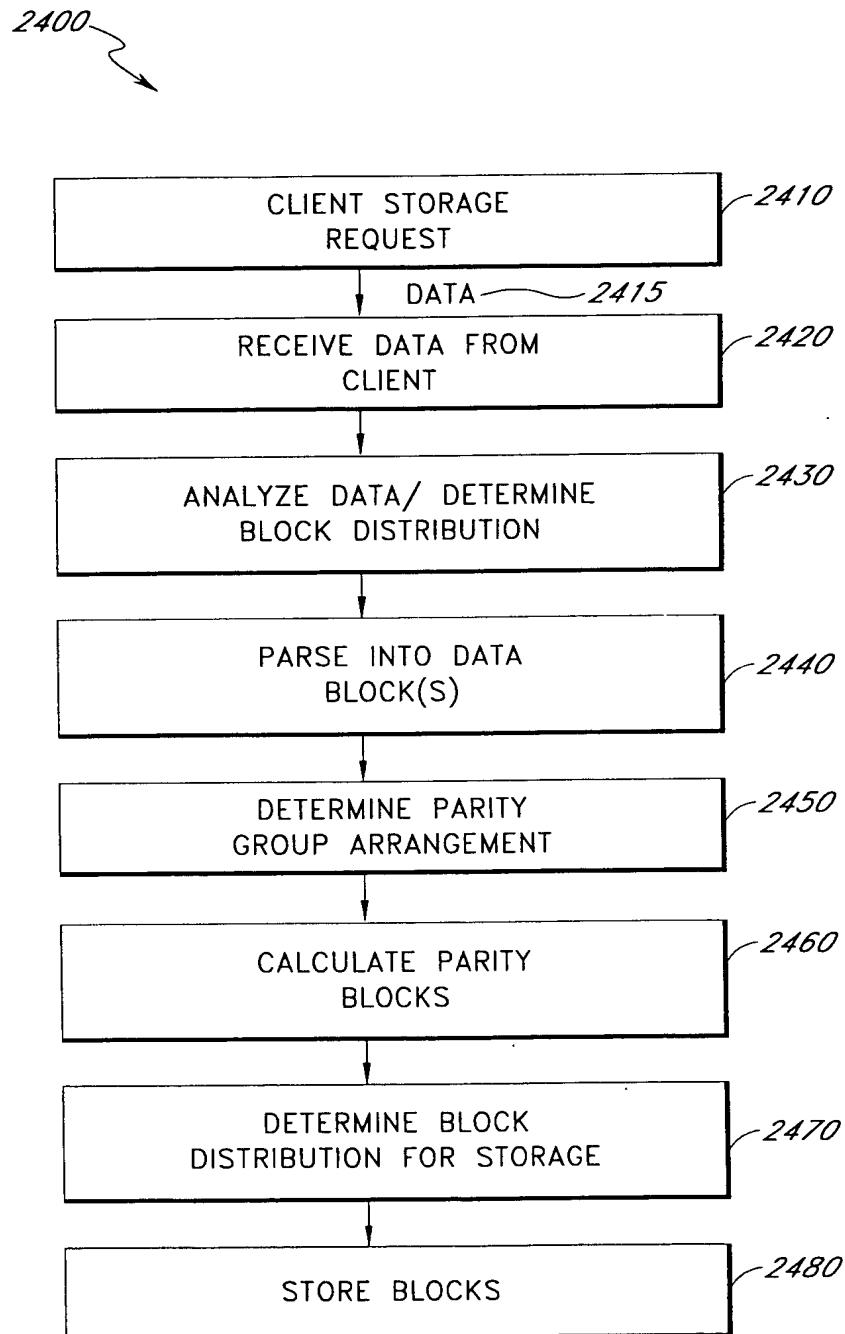


FIG.24A

20030627 09:45:27

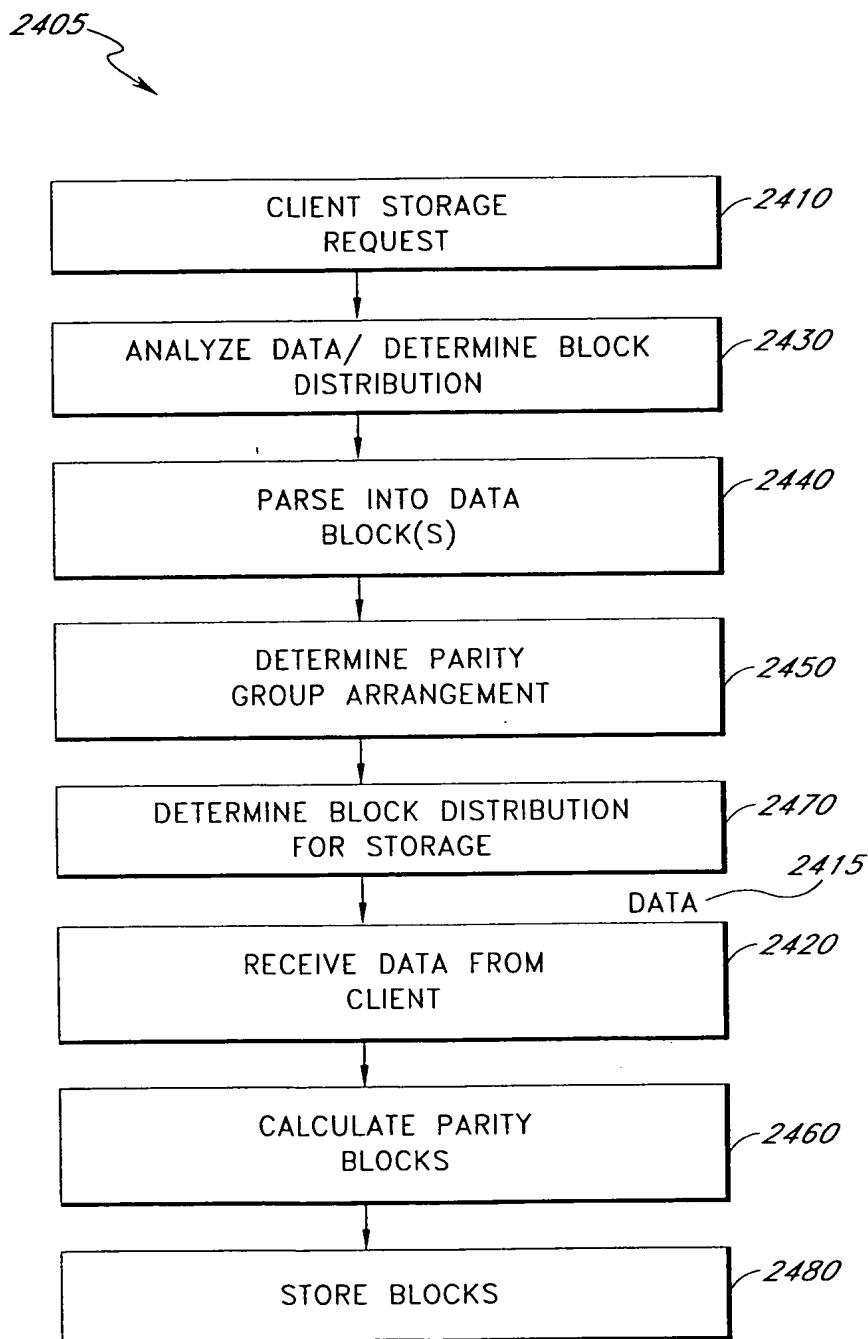


FIG.24B

2000 1000 800 600 400 200 100 50

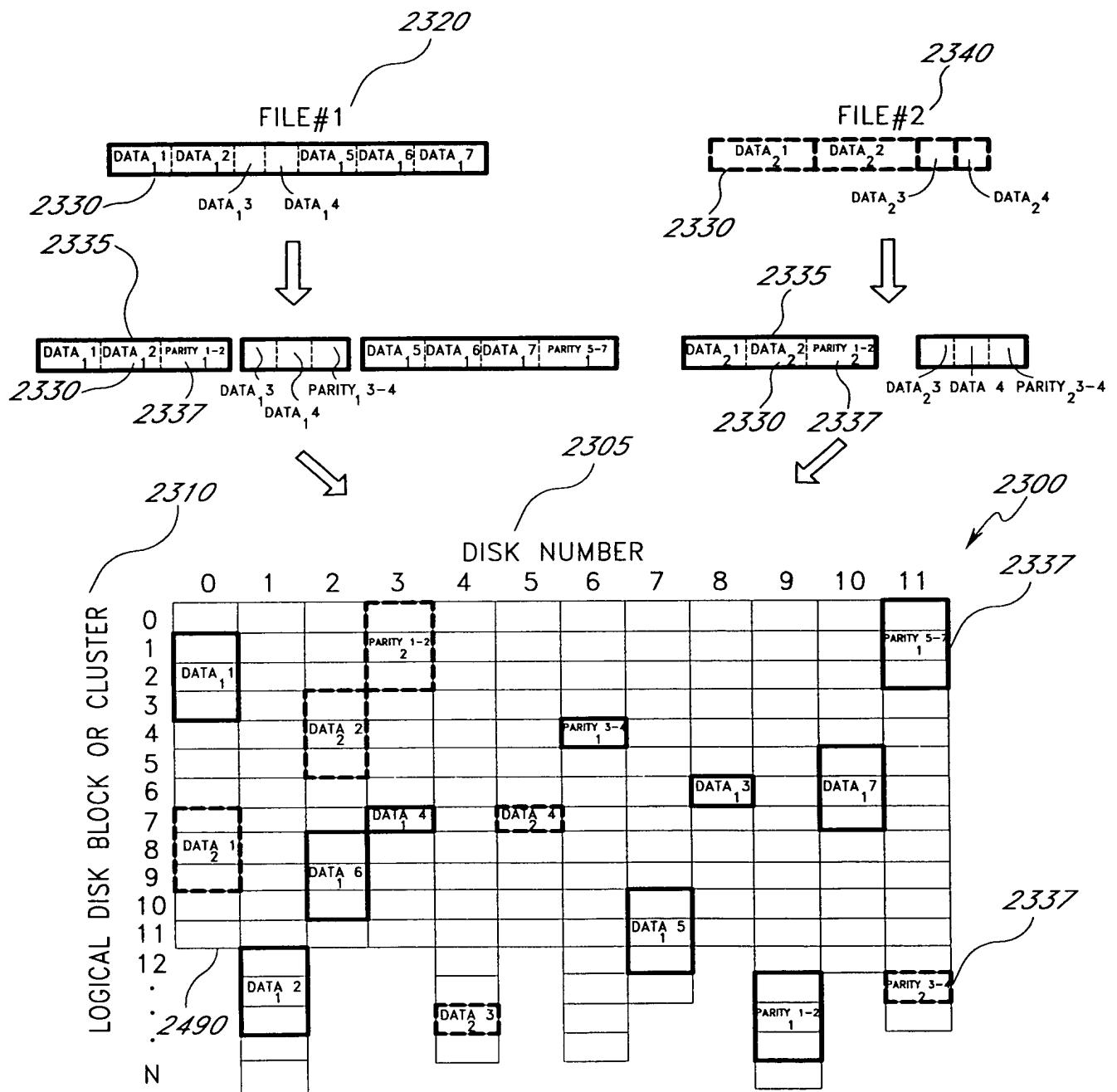


FIG. 25

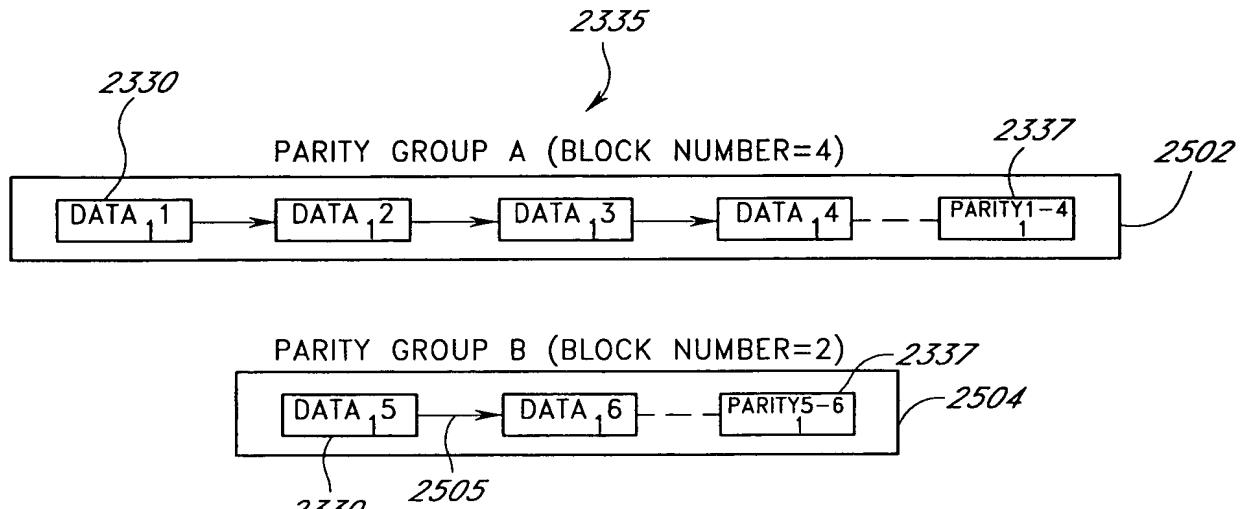


FIG. 26A

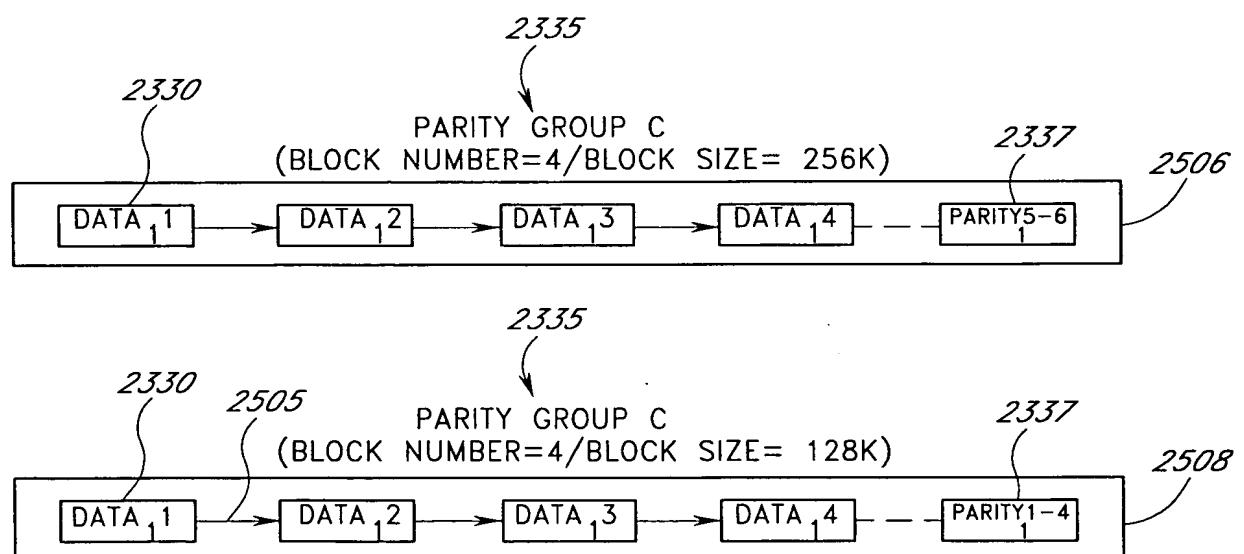


FIG. 26B

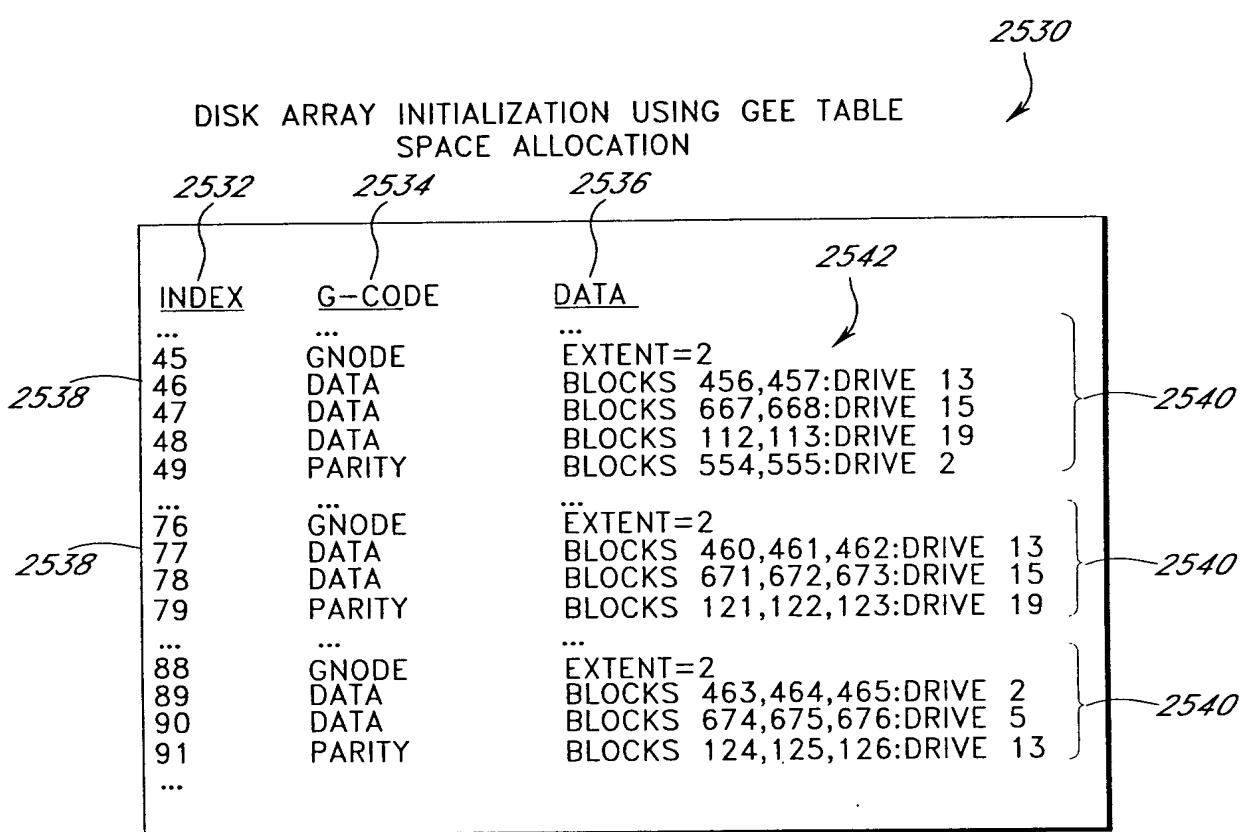


FIG.27

2448

ARRAY PREPARATION/ G-TABLE FORMATTING

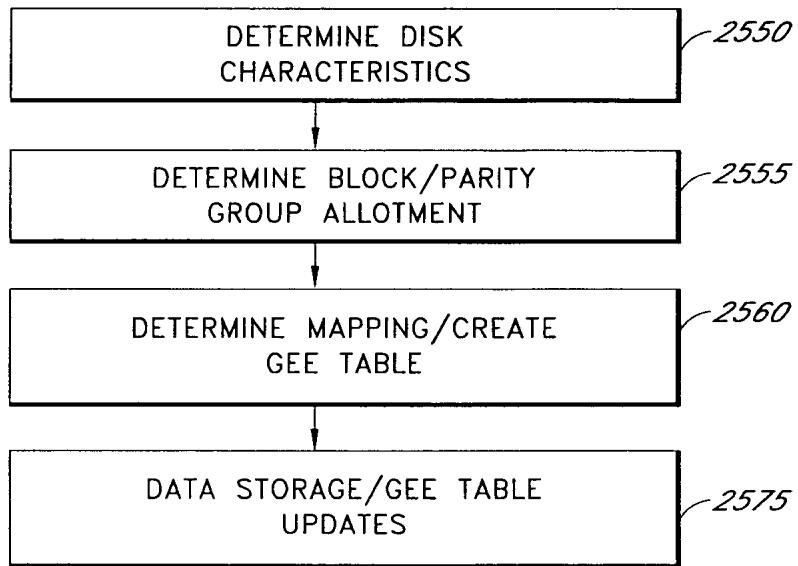


FIG.28

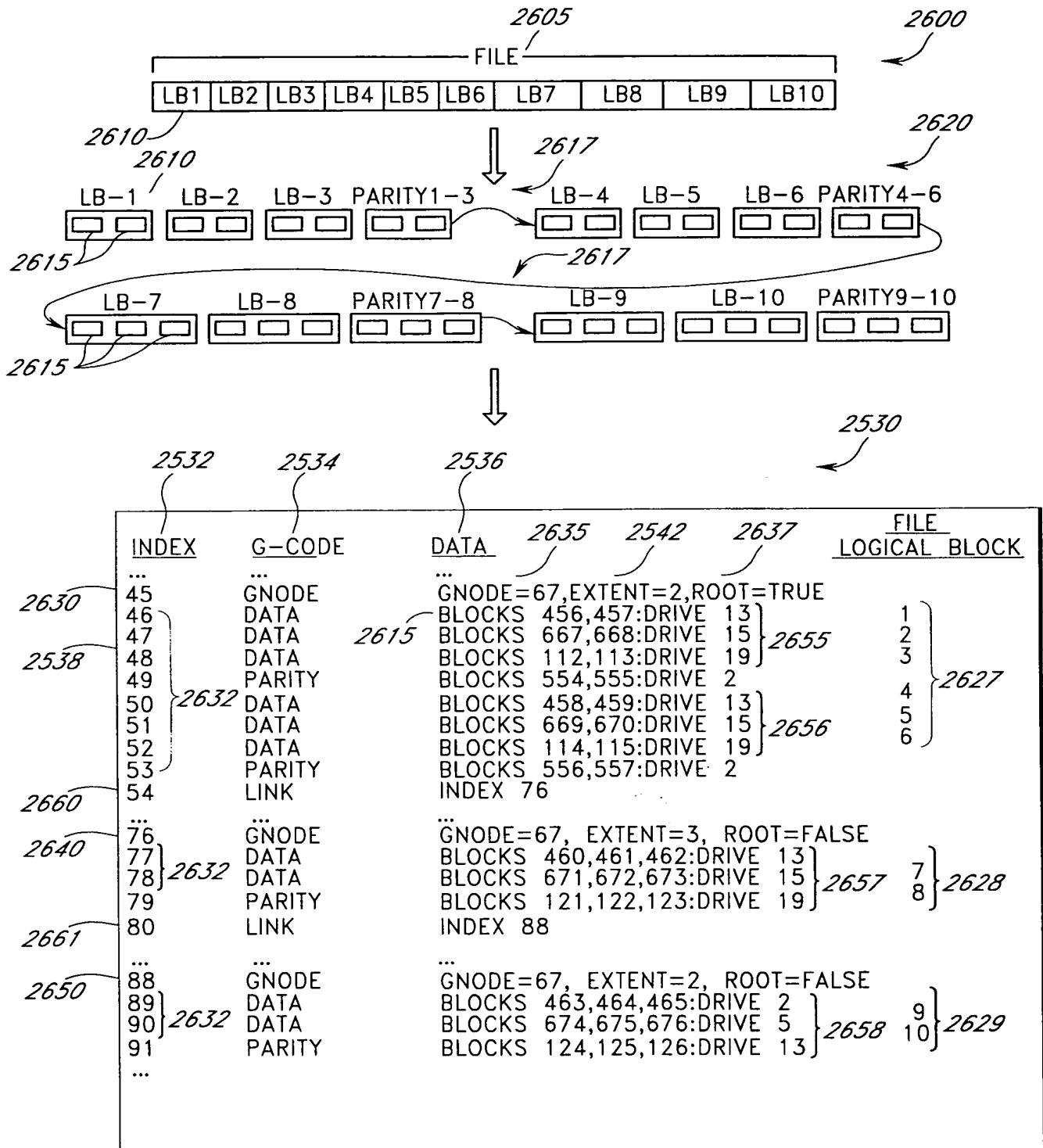


FIG. 29

10068957-050702

DRIVE FAILURE RECOVERY MECHANISM

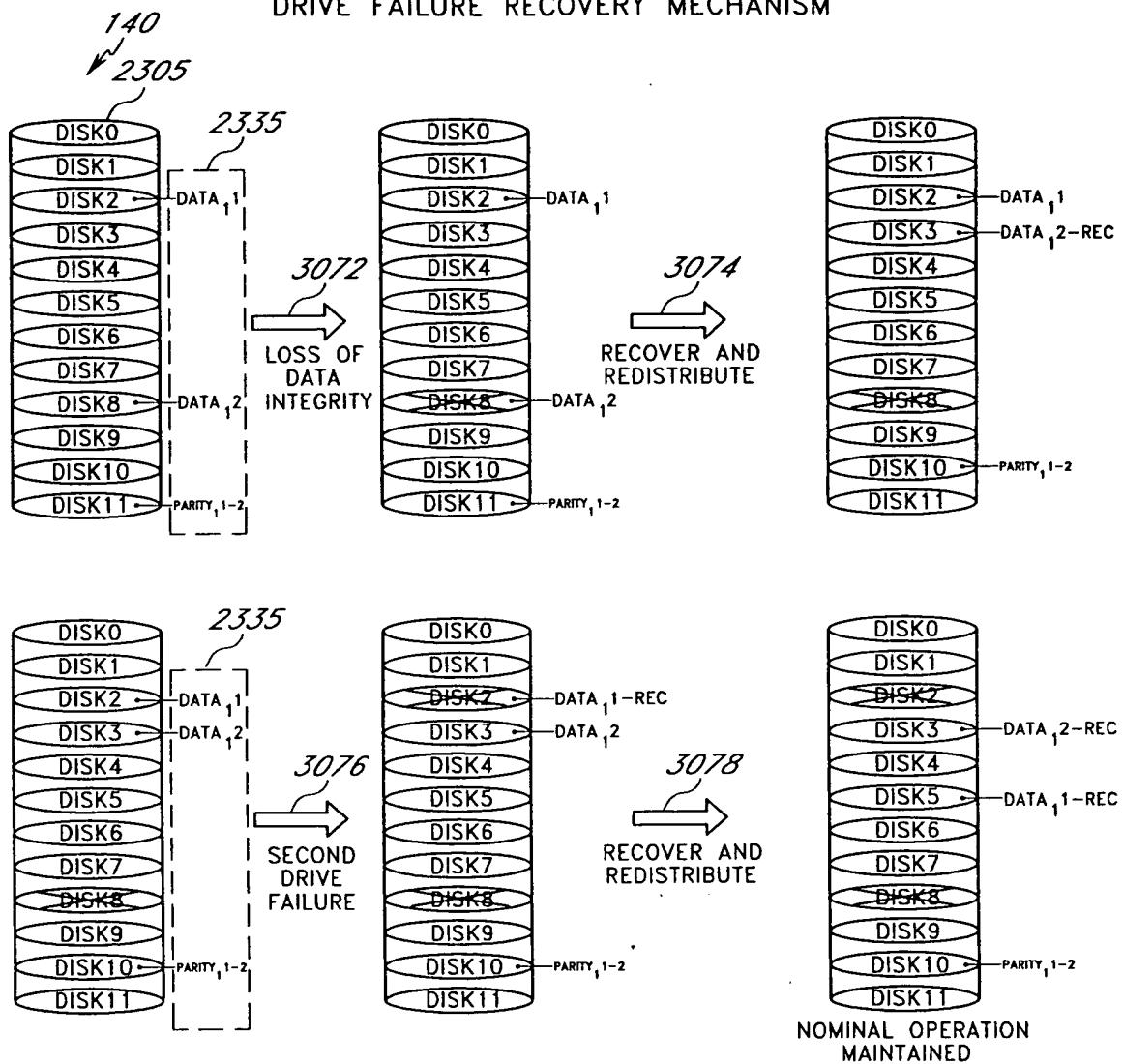


FIG. 30

40000000000000000000000000000000

3172

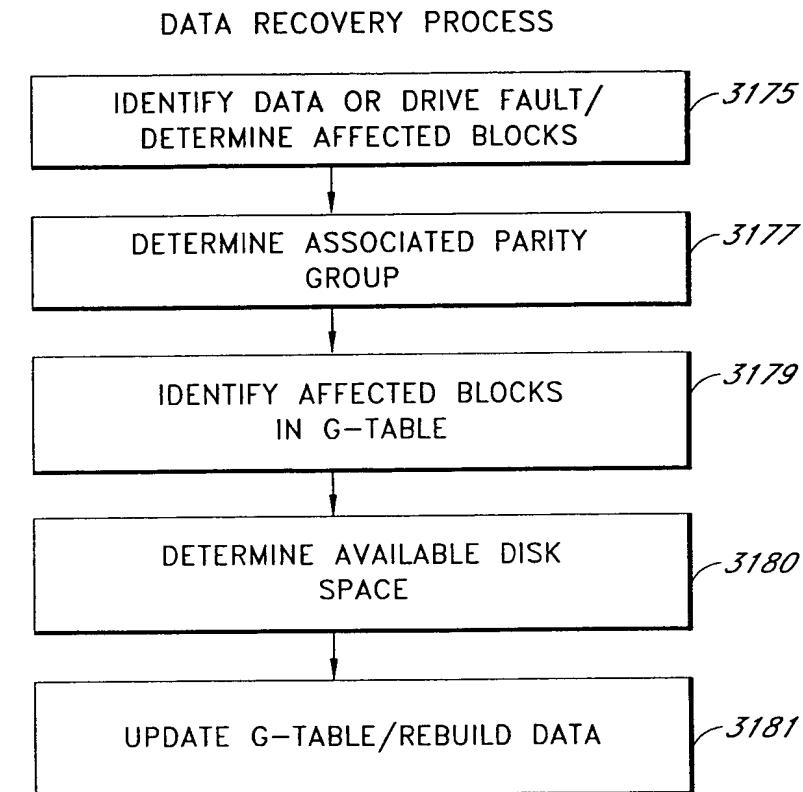
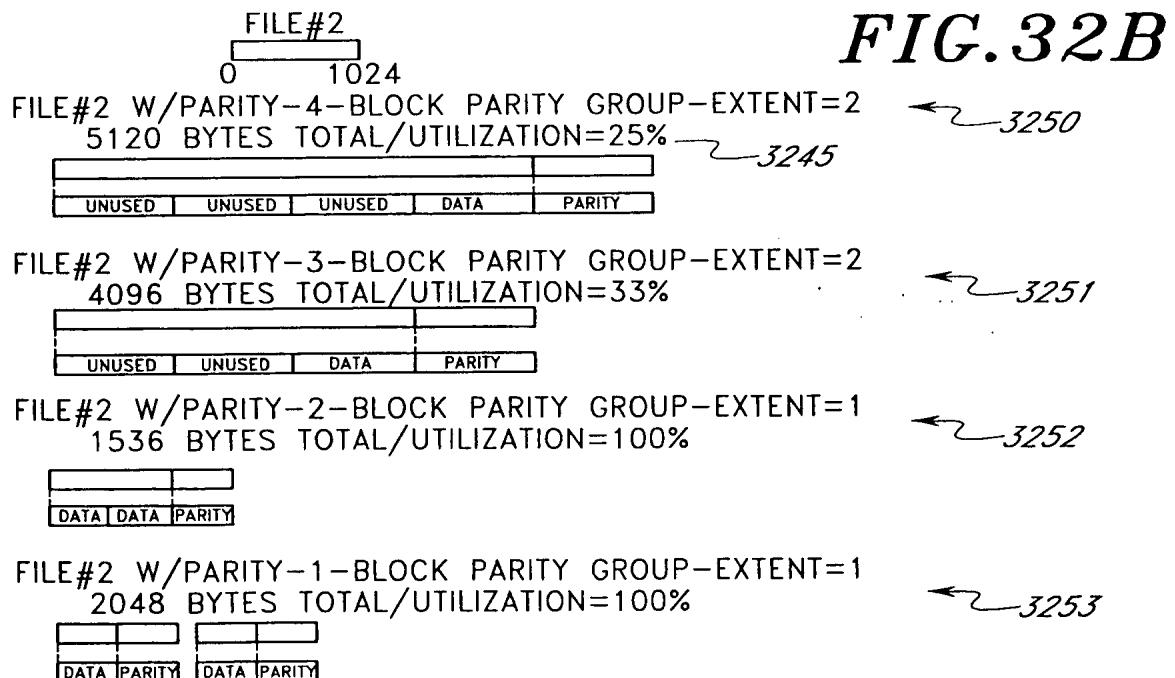
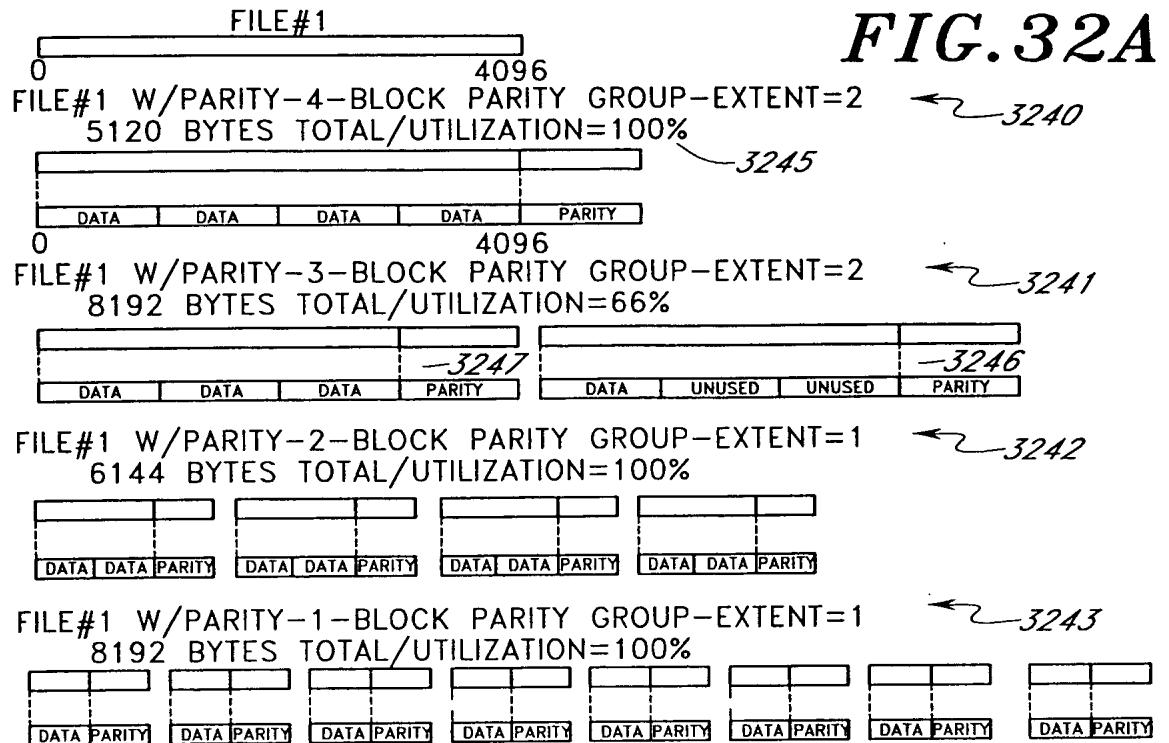


FIG. 31



2025 RELEASE UNDER E.O. 14176

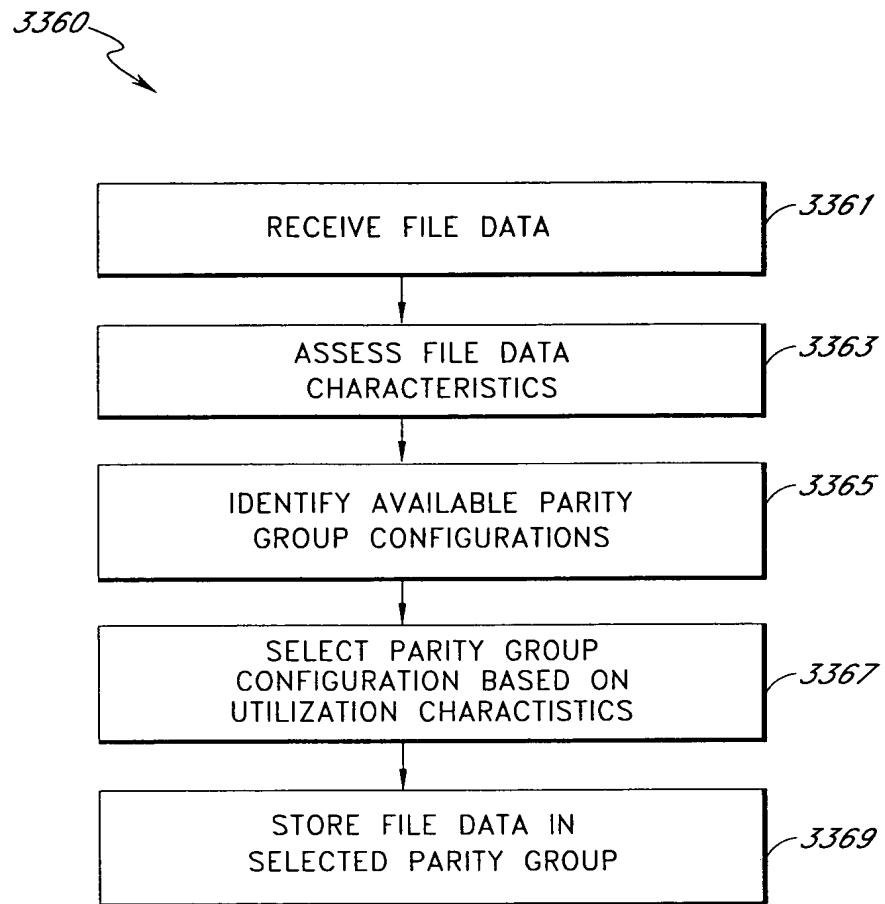


FIG. 33

FIG. 34A

		INTIAL ALLOCATION	3491	DISK SPACE%	3485
		4 BLOCK PANITY	3480	10000 GROUPS	36%
		3 BLOCK PANITY	3481	10000 GROUPS	28%
		2 BLOCK PANITY	3482	10000 GROUPS	22%
		1 BLOCK PANITY	3483	10000 GROUPS	14%

FIG. 34B

		DISK USAGE	3487	DISK SPACE%	
		FREE	OCCUPIED	TOTAL	3490
3480	4 BLOCK PANITY	2500 GROUPS	7500 GROUPS	10000 GROUPS	36%
3481	3 BLOCK PANITY	7500 GROUPS	2500 GROUPS	10000 GROUPS	28%
3482	2 BLOCK PANITY	3500 GROUPS	6500 GROUPS	10000 GROUPS	22%
3483	1 BLOCK PANITY	500 GROUPS	9500 GROUPS	10000 GROUPS	14%

FIG. 34C

		REDISTRIBUTION	3494	DISK SPACE%	
		FREE	OCCUPIED	TOTAL	3490
3480	4 BLOCK PANITY	2500 GROUPS	7500 GROUPS	10000 GROUPS	36%
3481	3 BLOCK PANITY	-5000 GROUPS OF 3 BLOCK PARITY	2500 groups	2500 GROUPS	5000 GROUPS
3482	2 BLOCK PANITY	+10000 GROUPS OF 1 BLOCK PARITY	3500 GROUPS	6500 GROUPS	10000 GROUPS
3483	1 BLOCK PANITY		10500 GROUPS	9500 GROUPS	20000 GROUPS

REDISTRIBUTION

PARITY GROUP REDISTRIBUTION PROCESSES

FIG. 35A

PARITY GROUP DISSOLUTION

5-BLOCK PARITY GROUP

DATA	DATA	DATA	DATA	DATA	PARITY
------	------	------	------	------	--------

3520



1-BLOCK PARITY GROUP

DATA	PARITY
------	--------

3-BLOCK PARITY GROUP

DATA	DATA	DATA	PARITY
------	------	------	--------

3525



OR

2-BLOCK PARITY GROUP

DATA	DATA	PARITY
------	------	--------

2-BLOCK PARITY GROUP

DATA	DATA	PARITY
------	------	--------

3530

OR

3530

1-BLOCK PARITY GROUP

DATA	PARITY
------	--------

1-BLOCK PARITY GROUP

DATA	PARITY
------	--------

3520

3520

3520

3520

FIG. 35B

PARITY GROUP CONSOLIDATION

3535

3-BLOCK PARITY GROUP

DATA	DATA	DATA	PARITY
------	------	------	--------

2-BLOCK PARITY GROUPS

DATA	DATA	PARITY
------	------	--------

DATA	DATA	PARITY
------	------	--------

3530



1-BLOCK PARITY GROUP

DATA	PARITY
------	--------

DATA	PARITY
------	--------

3525

OR

3-BLOCK PARITY GROUP

DATA	DATA	DATA	DATA	DATA	PARITY
------	------	------	------	------	--------

3515

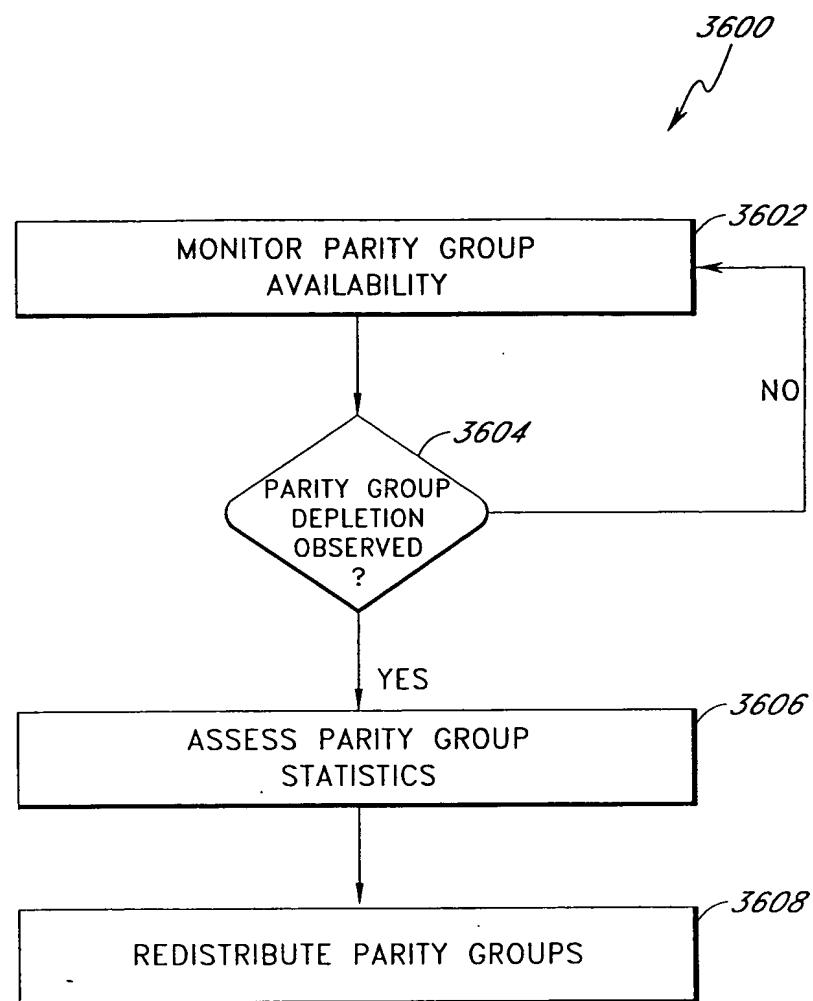


FIG.36

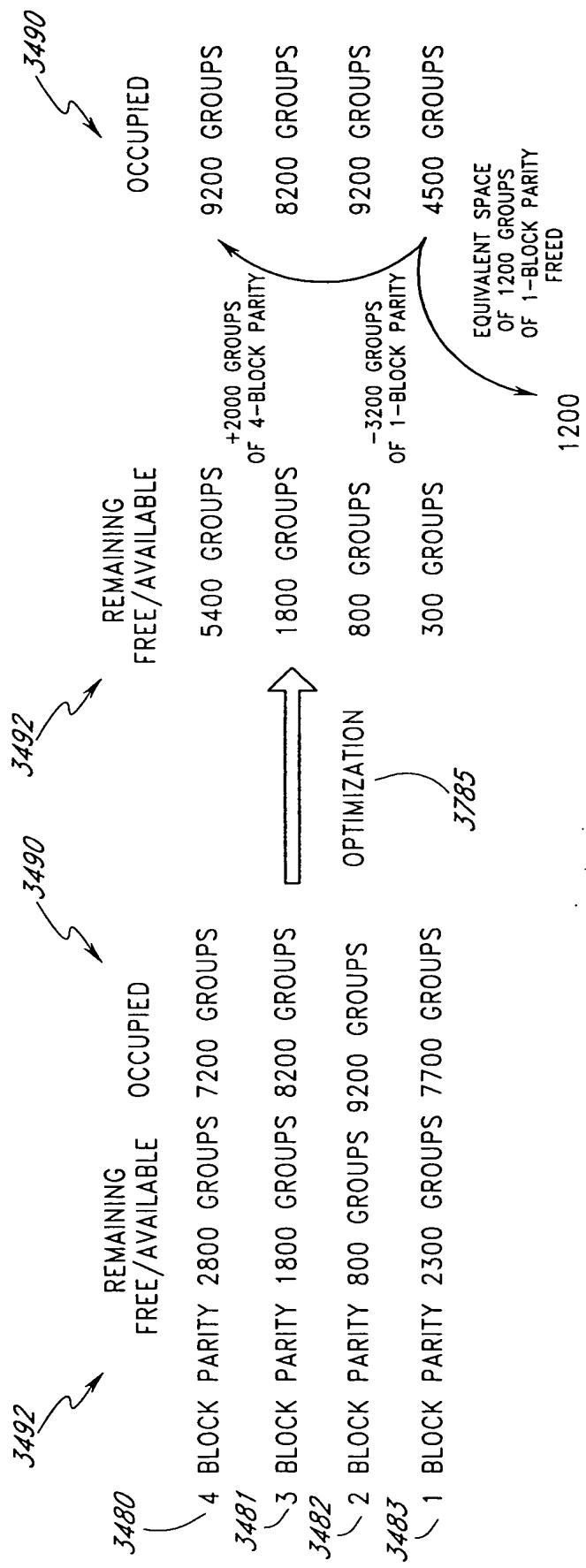


FIG. 37

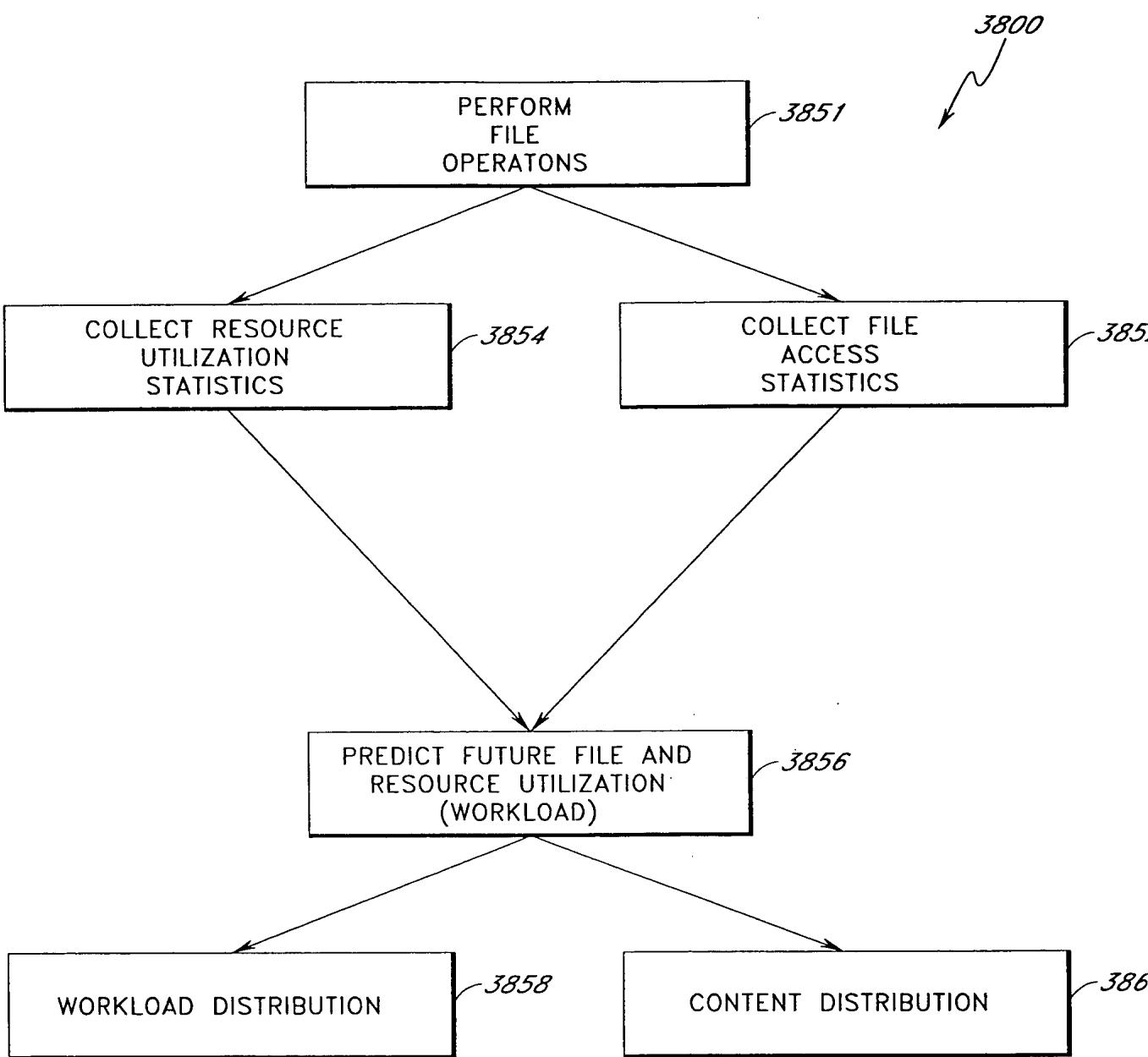


FIG.38

2020S0 "CS030300"

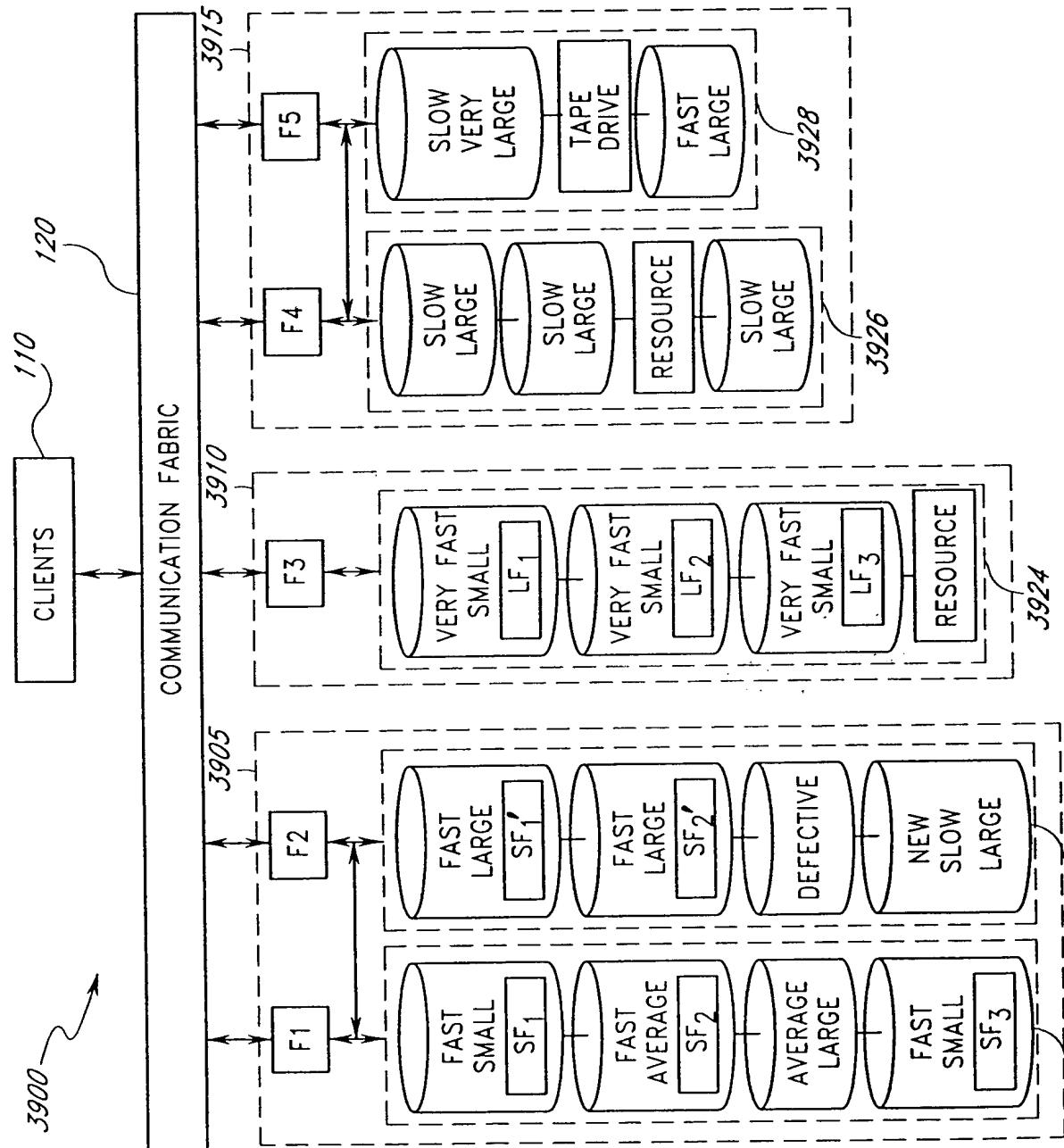


FIG. 39

3922

3920

2020/5/22 2:55:20

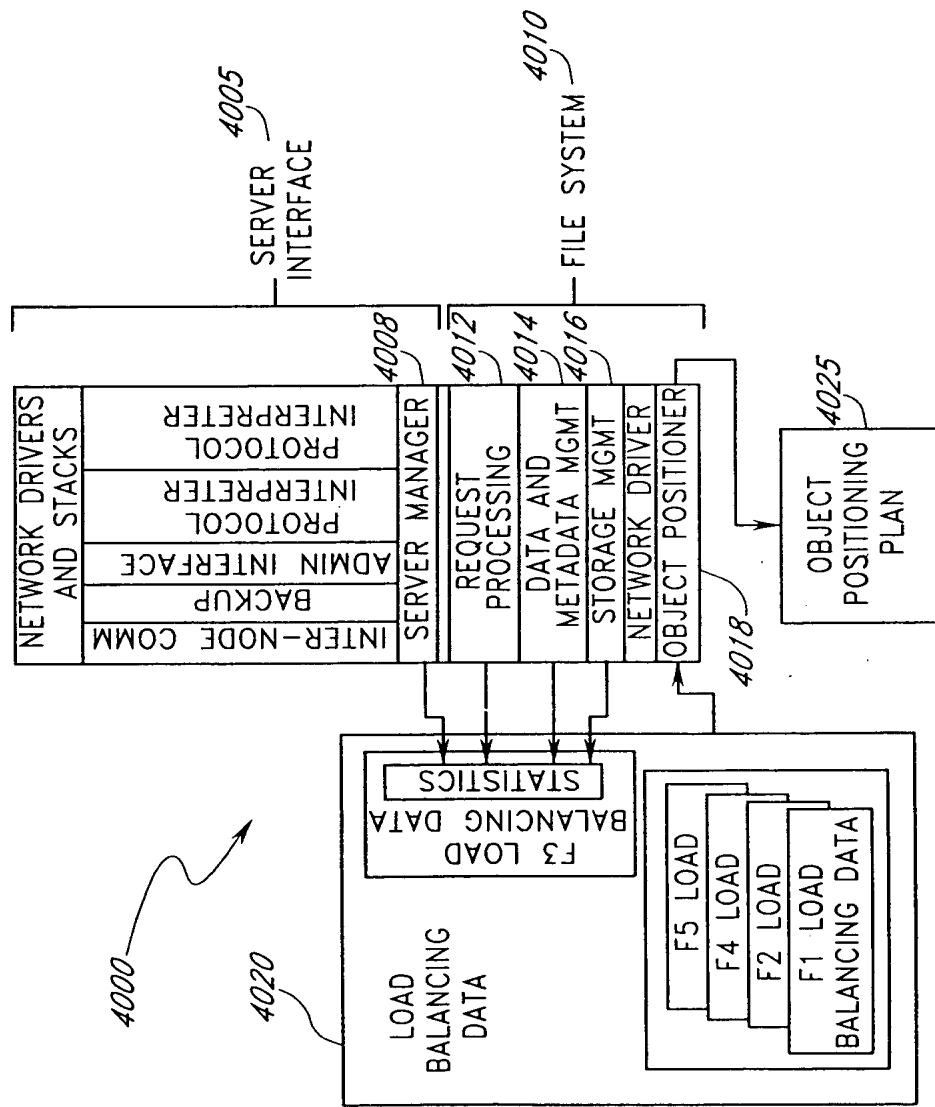


FIG. 40

F3 OBJECT POSITIONING PLAN

- PUSH LF TO F4-F5 CLUSTER
- ISSUE FILE HANDLE FOR LF=STALE
- IF REQUESTED,
 - SEND ACCEPTANCE FOR COPY OF SF TO F1
 - CREATE COPY OF SF
 - SEND FILE HANDLE OF SF TO F1

19. *Chlorophytum comosum* (L.) Willd. (Fig. 19)

4025

FIG. 41

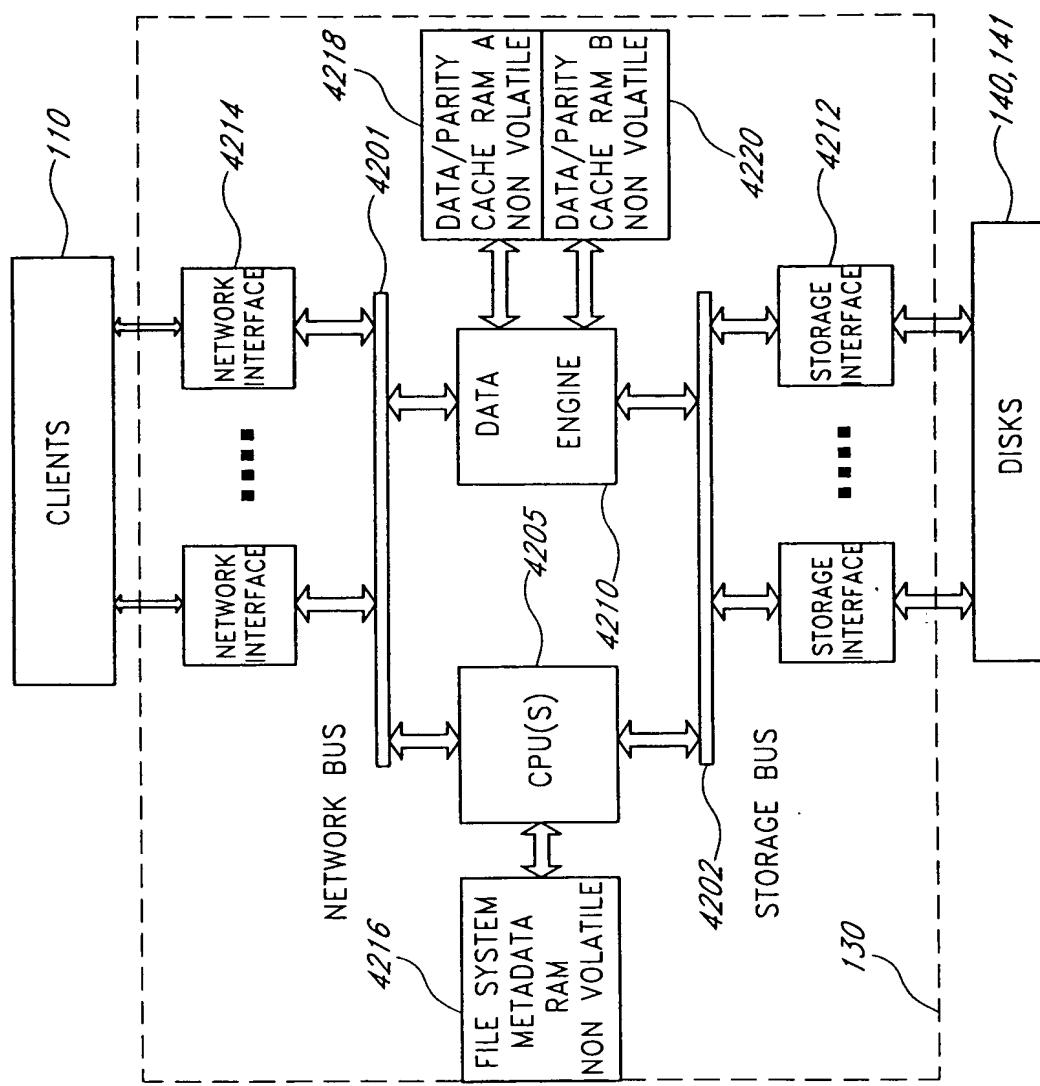


FIG. 42

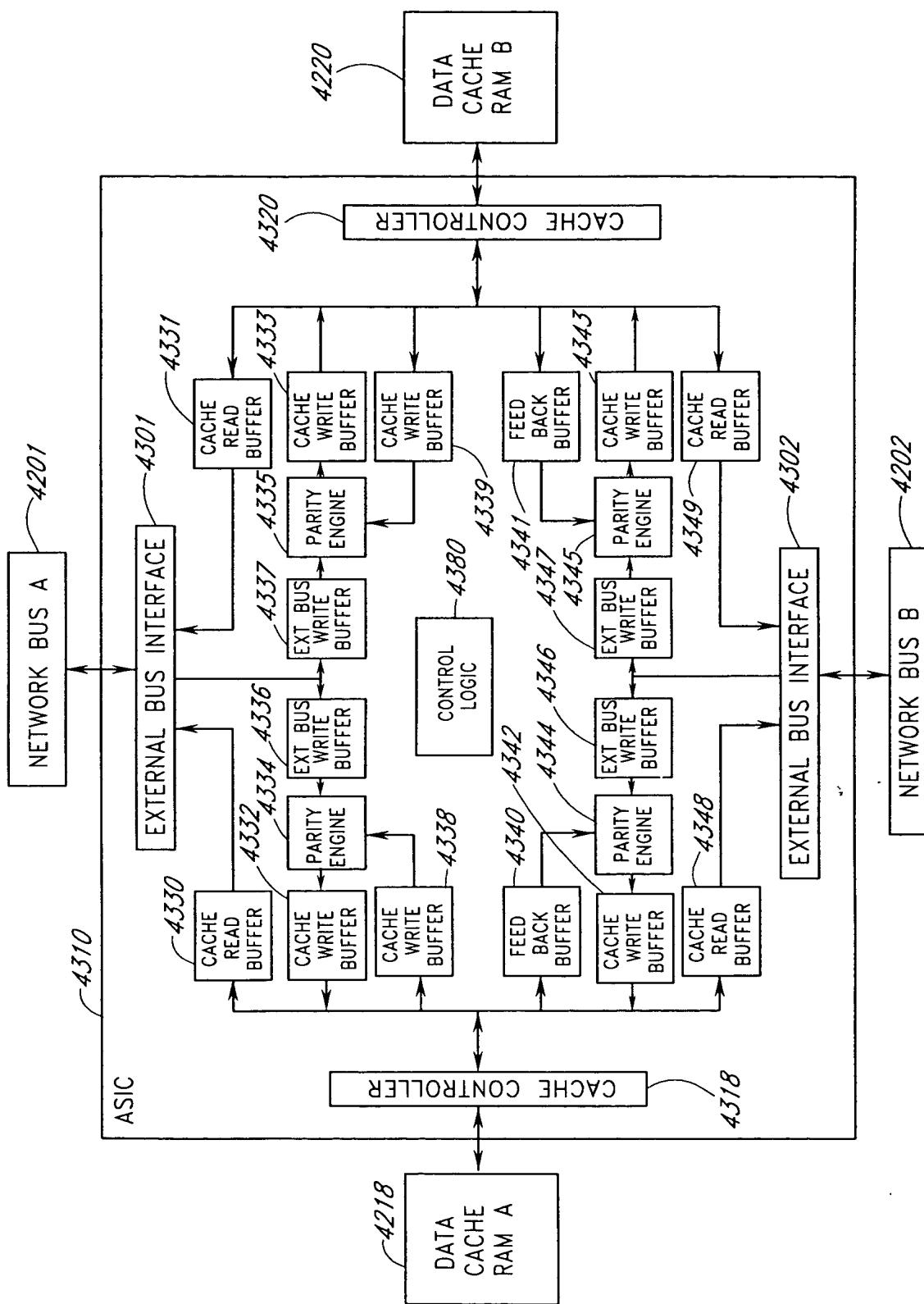


FIG. 43

PCI MAP	BLOCK SIZE	OPCODE	SPARE	PARITY INDEX	SPARE	RAM ADR
---------	------------	--------	-------	--------------	-------	---------

63.....62,61.....59,58.....56,55.....51,50.....35,34,32, 31.....0

FIG. 44

4400